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PLANNING NORTH CAROLINA CITIES

Editors' Note

City planning encompasses a large range of activities undertaken by planners and others to improve the health and environment of our urban areas. This issue of *Carolina Planning* highlights a variety of the programs and projects that are underway in North Carolina's cities.

The first two articles address issues related to housing. DeWayne Anderson discusses how public-private partnerships enable programs aimed at the preservation and reuse of urban structures. He describes a specific project in Reidsville, North Carolina, where an abandoned school is rehabilitated for affordable housing. The second article, by Victoria Basolo and William Rohe, challenges the ideal of homeownership. They expose the myths and realities of this American dream and focus on efforts in Durham and Charlotte to make homeownership a greater reality for low-income city residents.

Transportation is the theme of the second section, which begins with an article about recent efforts to involve the public in transportation planning. The four authors, Richard Atkins, Terry Bellamy, Don Bryson, and Elizabeth James, outline how the Greensboro Department of Transportation has involved citizens in the early stages of transportation projects. In the next article, Marion Clark discusses the City of Raleigh's efforts to improve the aesthetic quality of major road entryways into the City. She details how these efforts are implemented through a combination of land use, transportation, and landscape planning. Lastly, Anna Nalevanko covers another "hot" transportation planning topic as she describes Winston-Salem's involvement in a Federal test project for Advanced Public Transportation Systems.

Articles by James Brantley and Keva Walton share the themes of public involvement and neighborhood planning. Brantley's article looks at how some Raleigh neighborhoods are defining and preserving their identities by instituting resident-designed neighborhood conservation zoning districts, while Walton's article details how Charlotte's Neighborhood Matching Grants Fund has helped city residents work together to improve the urban environment.

The last set of articles address a variety of themes. In the first article, Karen Cragnolin takes us to the City of Asheville, where a consortium of public and private groups have committed themselves to the lengthy process of rejuvenating the French Broad River. The next article by Andrew Henry and Harvey Goldstein presents the results of surveys conducted to determine officials' reactions to a proposed merger of government functions in the City of Durham and Durham County. Finally, Kevin Krizek describes how Chapel Hill residents use and relate to public space along one of the city's most active streets. He details the methodology used to determine the findings and discusses their implications.

We hope that this issue will give you a taste of the many innovative programs that can be found in North Carolina's cities and provide you with inspiration on new ways to address issues in your area.

Merritt Clapp-Smith
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Public-Private Partnerships for Increasing Investment in Preservation

DeWayne H. Anderson

The purpose of this paper is to describe the motivations of investors, the obstacles to attracting investment to preservation ventures, public development needs addressed by preservation, financing tools available for housing rehabilitation, and the benefits of public-private partnerships for increasing investment in such ventures. A case study provides a successful example of how housing preservation and neighborhood revitalization can be accomplished through the use of a public-private partnership.

Motivations of Investors in Preservation

The amount of capital which can be attracted to preserve a historic building is directly related to the benefits that the project will produce. The cardinal principal governing both debt and equity investment in commercial real estate ventures is that a project's "value" must exceed its "cost." Investors evaluate a venture based solely on its ability to produce a future stream of cash or tax benefits; a property's value is determined by dividing its projected annual benefits by the market rate of return.

Real estate investors may receive any of four types of benefits: income, tax shelter, appreciation, and/or amortization. Typically, lenders' returns are restricted to income in the form of loan origination fees and interest payments. Real estate equity investors purchase limited partnerships to receive cash income and/or tax benefits. Profits from the sale of a property and amortization of debt are typically discounted by equity investors since these benefits will be realized at an unknown time in the future. Equity investors' primary objective from a property resale is to obtain the return of their original capital investment plus an amount needed to pay any tax liability which may arise from the sale.

The developer of rehabilitation ventures is typically not a lender or an equity investor. The developer's role is to act as a fiduciary for the equity investor. The investor pays fees to the developer to manage the planning, construction, and operational phases of the project and to assume the rehabilitation cost overrun and operating risks.

Obstacles to Investment in Preservation

Characteristics of historic rehabilitation ventures that frequently inhibit investment include the following.

1. The cost of substantially rehabilitating existing structures for a new use typically exceeds the cost of new construction. Some of the major factors which contribute to the relatively high cost of rehabilitation projects are:

- Upgrading older buildings to current safety and handicapped accessibility codes,
- Additional architectural and engineering services needed to document existing conditions in structures and to describe the scope of rehabilitation work,
- Insurance premiums to protect owners and contractors from losses to the existing structure, which may

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be incurred prior to placing a building in service,

- Environmental engineering services needed to identify environmental hazards in buildings and to plan and supervise the removal or containment of environmentally hazardous materials, and

- Rehabilitation work needed to meet the Secretary of the U.S. Department of the Interior's standards for historic preservation projects.

2. Much of the historically designated building stock is located in downtown areas, aging neighborhoods, and/or rural communities. The demand for commercial space and the rents which tenants can pay for space in these economically distressed markets restricts the financial viability of preservation projects.

3. Many buildings which are eligible for National Register status are typically overvalued by public and private owners, have title problems, are located on inadequately sized parcels, or involve other site problems which increase development costs. Many property owners are reluctant to take a property off the market for a two to three year period, which is needed to plan and finance a rehabilitation project.

4. The rehabilitation of historic buildings involves high development and construction risks due to the complexities of the planning process and the difficulties of predicting and controlling the costs of such projects.

These factors combined with the relatively poor profitability experience of prior preservation projects makes it difficult to obtain private financing commitments. Since the inception of the Federal Historic Preservation Tax tax incentive program in 1976, over 25,000 rehabilitation projects have been undertaken. Most of these projects have involved adapting historic structures located in inner city areas for specialty retail, office, high-income housing, and hospitality uses. A high percentage of these commercial rehabilitation tax credit ventures did not generate sufficient income to meet operating expenses, and many defaulted on loans.

Information in the National Park Service's 1992 Annual Report on the tax incentive program indicates that the number of rehabilitation projects has been declining in recent years. In 1992, about 700 tax credit projects were initiated nationwide; this represents a decline of more than 75 percent from the number of projects started in 1984. Over the past decade, about half of the buildings rehabilitated under the historic rehabilitation tax credit program have been adapted for housing use. In 1992, eighty-eight percent of the total number of housing units produced in historic buildings combined the rehabilitation and low-income housing tax credits.

Public Needs Addressed by Preservation

Since the rehabilitation of landmark structures impacts local community development needs, public lenders have incentives to provide financial support for these projects. Public benefits that may result from preservation projects include:

1. The preservation of historic cultural landmarks, which helps to strengthen citizens' sense of community and to reduce the incidence of crime and other social problems;

2. The expansion of the supply of affordable rental housing;

3. The development of necessary public facilities;

4. The revitalization of declining business districts or deteriorating inner city neighborhoods;

5. The recycling of former schools, hospitals, or other publicly-owned surplus buildings for new uses;

6. The preservation of open space and farm land and the utilization of existing public infrastructure;

7. The expansion of local and state governments' revenues and the creation of new jobs; and

8. The reduction in the adverse environmental impact of building debris on landfills and the elimination of the existing environmental hazards in buildings.

In economically distressed market areas, affordable multi-family rental housing is typically the only adaptive use which can attract public and private investment to rehabilitation ventures. Federal, state, and local government low-interest rate loan programs are available to finance housing preservation projects. Tax-benefit-oriented limited partnership syndications can combine rehabilitation and low-income housing tax credits to generate attractive investor yields.

It is a paradox that in many communities housing is the only viable adaptive use for rehabilitating historic buildings, but affordable housing is judged to be an undesirable

use by local interests. This opposition to low-income rental housing is based on subjective public attitudes about the prospective tenants of rental housing.

Public-Private Partnerships for Increasing Investment in Preservation

Public-private partnerships provide a flexible mechanism for attracting public investment by assuring that local development priorities are considered in planning preservation projects. Joint-venture partnerships also combine the expertise and financial capacity of private developers and local governments.

The appropriate partnership structure for a given project is determined by the role and level of financial risk assumed by each partner. Typically the public partner is expected to:

1. Define the local community development agenda,
2. Select the private developer partner,
3. Contribute a publicly-owned surplus historic building or assist the developer in obtaining site control of privately owned property,
4. Participate in the design of the project,
5. Package applications and administer Federal and State loans and grants,
6. Assist in obtaining approval of local financial support,
7. Monitor the operation of the project, and
8. Accept and administer historic easement donations.

The private partner in a public joint venture is generally expected to:

1. Coordinate the project's planning process,
2. Obtain private debt and equity capital commitments,
3. Manage the rehabilitation of the project,
4. Assume management responsibilities for the property and the partnership, and
5. Assume the development, construction, syndication and operating risks.

Although public-private partnerships have potential to expand investment in preservation projects and to assist localities in addressing other development priorities, the approach has not been widely used. Obstacles that inhibit the broader use of public-private joint ventures arise from the following facts:

1. Historically adversarial relationships have existed between private developers and local public officials. Local governments' role has traditionally been confined to the regulation of private development activities through zoning, sub-division regulations, and building codes.

2. Most local officials do not have the mortgage banking training or experience needed to understand real estate underwriting or to evaluate the risks assumed by the developer. These risks exist in the planning, construction, and operational phases of a rehabilitation project. Public staff and elected officials have little incentive to assume the financial and political risks involved in a preservation venture. Bureaucratic and political agendas delay and complicate the process of planning preservation projects; these problems increase exponentially with the size of the locality.

3. Many private developers do not understand public policy issues and are inexperienced in participating in the open political process which is inherent in planning a community development project.

Tools for Financing Housing Preservation

The two basic problems in underwriting an affordable housing rehabilitation venture are obtaining public and private debt and equity commitments and eliminating project operating deficits. Currently, there are two alternative sources available to finance affordable housing preservation. These are the Rural Rental Housing Loan Program (S.515) and layered public financing.

The S.515 program, which is administered by the Farmers Home Administration (FmHA), provides a first mortgage permanent loan for ninety five percent of a project's appraised value at one percent interest with a fifty year amortization. Sponsors of S.515 complexes must obtain interim financing to fund the completion of the project. Construction loans are typically provided by commercial banks at market rates. These loans are targeted to distressed rural markets and thus are not available in most urban areas.

The competition for S.515 loans is intense. A minimum of three years is required to obtain a commitment of these funds, and there is political opposition to extending funding for the program. FmHA regulations restrict the maximum cost of housing units in rehabilitation projects to no more that one hundred and five percent of the cost of units in newly constructed structures. This cost containment requirement typically creates the need to obtain additional sources of financing in S.515 rehabilitation deals.

Layered financing is a second method of financing rehabilitation housing projects. This approach involves the layering of private loans, federal, state, and local loans or grants, and private equity in a variety of combinations. Sources of layered public financing for housing include federal HOME and CDBG funds, state housing finance, agency loan programs, and local government funds. The terms of the public loans are generally determined by the local market conditions affecting each project, and each loan program has its own underwriting criteria, program regulations, application and deadline requirements. Most public lenders have no formalized procedures for linking programs administered by other public agencies.

Generally, the public lenders provide both interim and permanent loans. The terms of public financing programs include below-market interest rates, loan amortization periods of fifteen to fifty years, and loan terms with a minimum of fifteen years. Housing loan debt service payments may be all or partially accrued with a deferred balloon payment, due a minimum of fifteen years from the date a building is placed in service.

The public lenders' cultural environment is significantly different in each state. Many state housing finance agencies have a preference for investment for owner rather than rental housing, for new construction rather than rehabilitated housing, and for public rather than private borrowers. Some public lenders tend to avoid privately sponsored rehabilitation ventures due to the underwriting complexities and risks involved in such deals.

The second underwriting problem which must be addressed in the design of affordable housing rehabilitation ventures is the elimination of project operating deficits. These deficits result from the limited rent paying abilities of eligible tenants.

In order for a housing unit to qualify for low-income housing tax credits, tenants' income must not exceed sixty percent of the median income for the county in which the project is located, and tenants' shelter rent cannot exceed thirty percent of the county's sixty percent median income limit. This compliance period extends for fifteen years from the date the building is placed in service.

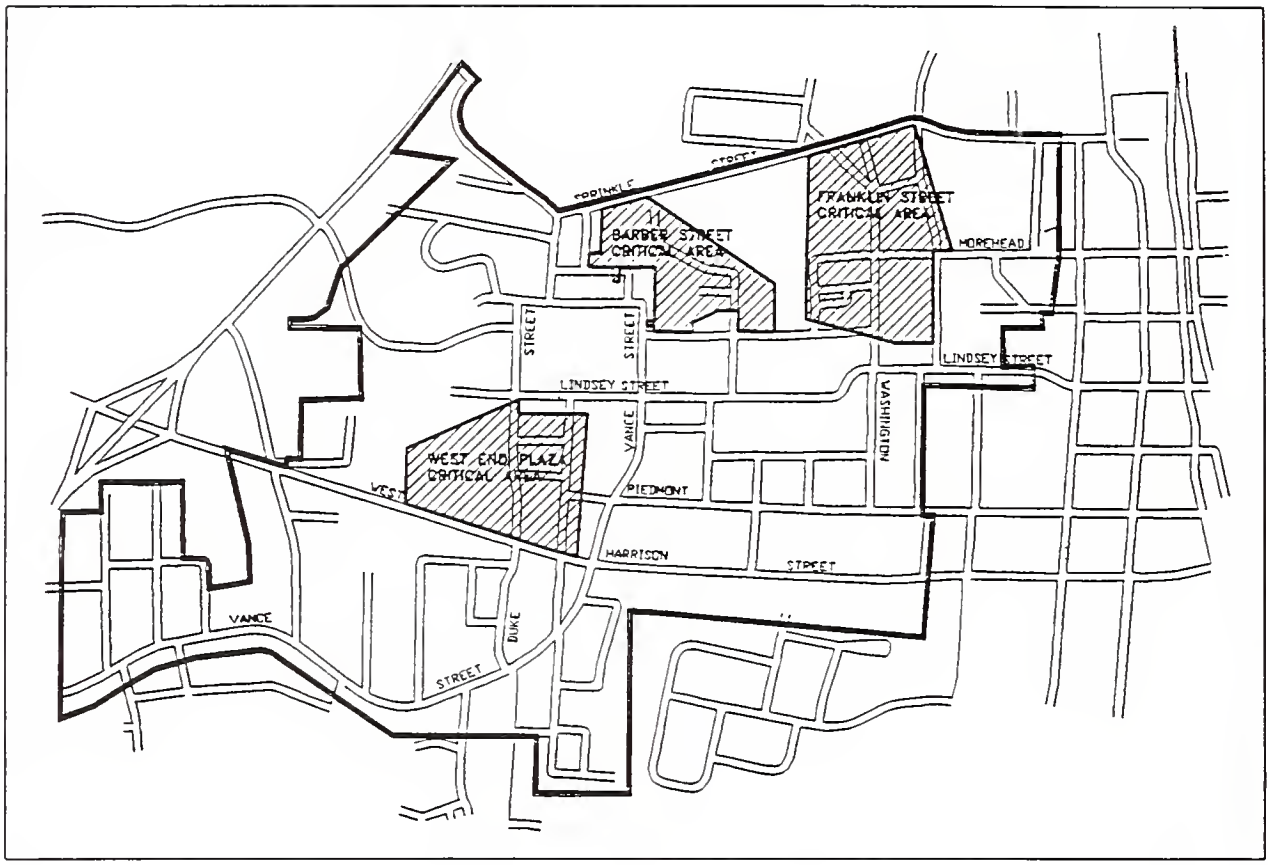
Preservation projects typically involve multistory structures which are most suitable for occupancy by elderly and/or small family households, which have restricted incomes. In non-metropolitan markets, low-income eligible tenants' maximum average shelter rents, based on thirty percent of income, will generally range from $100 to $275 per month. After deduction of tenant paid electric utilities of about $75 per month, tenants' contribution to project rent generally range from $25 to $200 per month. A multi-family housing complex's operating and replacement reserve expenses will typically amount to $200 per month per unit. Thus, an operating deficit of up to $175 a month per unit may exist before debt service is considered.

A number of techniques may be used to eliminate housing operating deficits, including the provision of public or private rental assistance for tenants, reduction in local property taxes, water, sewer and/or trash collection fees, and/or the use of non-residential project income to subsidize housing operating deficits. The operating deficit problem generally does not exist in S.515 financed projects due to the fact that FmHA provides project-based rental assistance to tenants. In layered financing projects, rental assistance may be provided by the sponsor, the local government, or through Section 8 rental assistance. The lack of a viable project-based tenant rental assistance program linked to public financing is currently a major obstacle to developing affordable housing in rural market areas.

After a project has received loan and operating subsidy commitments, private equity commitments can be obtained. Attracting private equity to housing rehabilitation projects is not a problem due to the attractive yields that are created through the combination of the rehabilitation and low-income tax credits. The historic rehab credit is a one-time twenty percent credit claimed in the year that a building is placed in service. The Low Income Housing Credit is either a four percent credit over a ten year period for federally subsidized projects or a nine percent credit for non-federally funded new construction or rehabilitation projects.

Public-Private Partnership Preservation Case Study

The RHS Apartment and Old Towne Neighborhood Revitalization project in Reidsville, North Carolina, provides a successful example of the use of a public-private partnership to rehabilitate a historic structure for affordable housing. It also shows how a local



Olde Towne Critical Areas, Reidsville, North Carolina

government can use preservation of a landmark building as a catalyst to trigger the revitalization of a deteriorating residential neighborhood.

In 1990, the City of Reidsville adopted a comprehensive development plan which called for development of specific neighborhood plans to guide future development and revitalization activities in neighborhoods. The Old Towne Neighborhood plan, developed in 1993, was the first such plan. The planning process involved extensive participation by area residents.

The Old Towne area contains 2,093 persons or fifteen percent of the city's population. The area's population includes a concentration of minority persons with median incomes of about 70 percent that of the average of the total city population. The neighborhood's housing stock was deteriorated and affected by the blighting influence of two vacant deteriorated school buildings which historically had been cultural and physical focal points of the area. Three problem areas were identified to be the focus of neighborhood revitalization activities: Franklin Street, Barber Street, and West End Plaza.

The former Reidsville High School, which is located in the Franklin Street area, was constructed in 1922 on a site which had previously been occupied by a school. Additions were added to the building in 1930 and 1941, and in 1953 a gymnasium/cafeteria building was constructed to the north. In 1980, the school was abandoned and the gymnasium/cafeteria was converted to a City Recreation and Senior Center. In 1990, the high school property was donated to a private partnership through the Reidsville Main Street Association. In 1992, the partnership obtained a commitment from the Farmers Home Administration for a S.515 Rural Rental Housing loan to rehabilitate the property. After the FmHA loan commitment was obtained, the city initiated the planning process for the revitalization of the Franklin Street area, and the developer began work on design development plans for the high school. Both the public and private components of the program were developed with close cooperation between the city and the developer.

After completion of the Old Towne plan, the city obtained a Community Development Block Grant (CDBG), which included funding for activities in all three critical areas of the neighborhood. The Franklin Street activities included $39,000 for development of public improvements to provide access to the school

and residential lots which are located on the former school playground. The 1.29 acre playground property was donated to Habitat for Humanity by the high school developer. Habitat is developing four affordable dwellings on the property.

The city also amended its zoning ordinance to amortize a mobile home park which represented a blighting influence on the school property and the surrounding neighborhood. A church acquired and occupied the second vacant school in the area.

The city obtained a second CDBG grant in the amount of $250,000 for abatement of environmental problems in the school building, for infrastructure improvements on streets surrounding the school, and for landscape improvements to Pine Street, which separates the school from the Senior Center. These funds will be repaid to the city by the developer.

The RHS Limited Partnership will expend a total of $3.5 million to rehabilitate the school for 53 elderly and handicapped apartment units in accordance with the Secretary of the Interior's Standards. Sources of funds include the S.515 loan of $2.3 million, the CDBG loan of $250,000 and $1 million in equity investment raised from the sale of tax credits.

In 1994, the City of Reidsville received an award for the Old Towne Neighborhood Plan from the North Carolina Chapter of the American Planning Association. This award recognizes the significant potential of the public-private partnership approach for increasing investment in housing rehabilitation projects and for revitalizing inner city neighborhoods. However, the reader is cautioned that no two preservation projects happen twice in exactly the same fashion. Each local situation possesses its own unique matrix of variables. CP

Homeownership as Public Policy: Trends in North Carolina and Beyond

Victoria Basolo and William M. Rohe

The importance of homeownership is deeply embedded in our society. Historians, writers, and the average person attribute intrinsic value to owning one's home. Walt Whitman, for example, wrote "A man is not whole and complete...unless he owns a house."[1] Society also associates more tangible social and economic benefits with ownership such as enhanced pride in the community and tax advantages. These benefits, however, elude many low- and moderate-income households because they lack the financial resources to purchase a home.

Public officials also herald the virtues of homeownership and have developed policies to increase homeownership for low- and moderate-income households. Government assistance for homeownership at the federal level appeared decades ago with the creation of the Federal Housing Administration, and more recently, state and local governments have taken an active role in the promotion of homeownership.[2] Although homeownership policies and programs involve investment of public dollars, strong political support for these policies exists across communities and among levels of government. As a result, there are many publicly-sponsored homeownership programs operating in communities throughout the country. In the rush to jump on the homeownership bandwagon, however, the potential pitfalls of homeownership programs are often overlooked by their sponsors. In addition, program planning may be minimal and evaluation of programs may be completely absent from the process.

This article examines the popularity of homeownership and its desirability as a policy outcome in our society. We begin by discussing the homeownership ideology and ownership trends in the United States. Within this discussion, we present the advantages and disadvantages of homeownership for both the individual and society. We then narrow our discussion to homeownership and related policies and programs in North Carolina. We consider the patterns and trends of homeownership, analyze the affordability of ownership for lower-income households, discuss the intergovernmental aspect of homeownership efforts, and consider some of the public and private strategies used to increase homeownership in the State. Next, we highlight homeownership efforts in two North Carolina cities: Charlotte and Durham. Finally, we offer some concluding remarks and recommendations on the development of homeownership policies and programs in local communities.

The Homeownership Ideology

Homeownership has been called the "American Dream" by many, but others have declared it a form of discrimination.[3] Critics argue that the idyllic image of homeownership masks the commodification of housing and its role as a symbol of social class. From this perspective, homeownership is nothing but a form of systematic tenure discrimination with renters being

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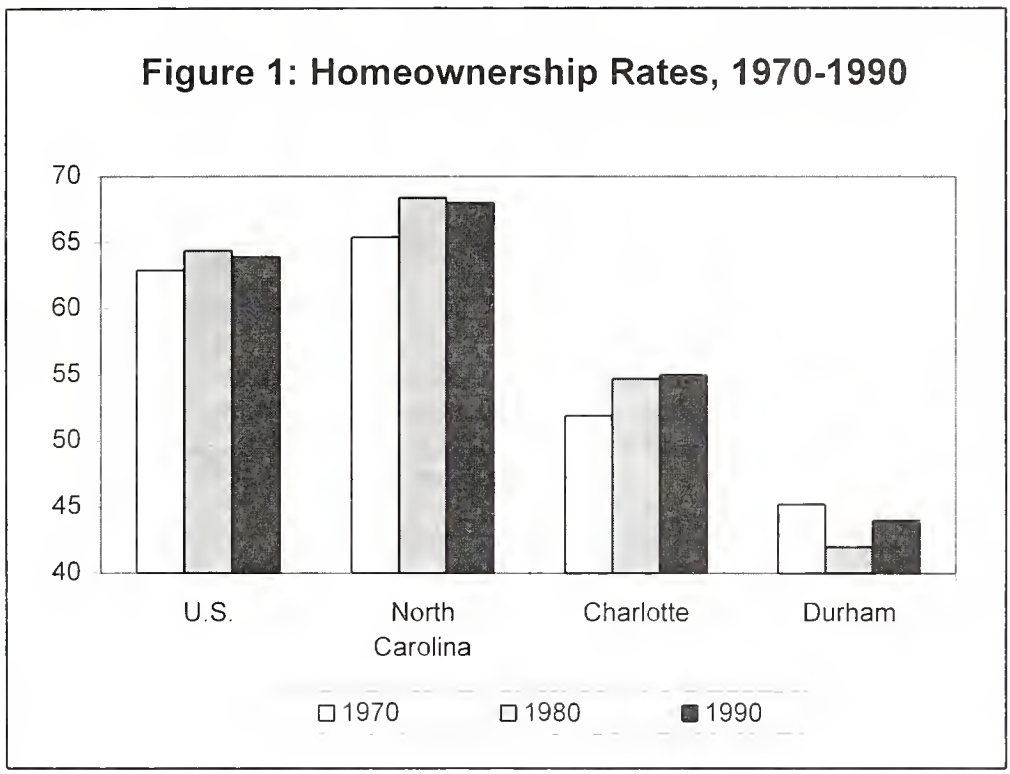
the disadvantaged group. These two views of homeownership represent two distinct ideological camps. On the whole, however, it is clear from ownership data that Americans are convinced of the advantages of homeownership. For example, during most of this century, the rate of homeownership rose steadily in the United States and greatly exceeded the rates in many European countries.[4] In 1990, almost 64 percent of Americans owned their homes and a recent survey reported 68 percent of renters want to own a home someday.[5] Clearly, the majority of Americans prefer ownership to other forms of tenure.



Homeownership data say nothing about the reasons for the homeownership preference or the seemingly universal popularity of homeownership public policies. Part of the favorable status given homeownership is due to a cultural norm that sanctifies owning a home. Our society views homeownership as an important life goal and associates social status with owning a house.[6] Other claims about the social and economic benefits of homeownership also contribute to its popularity.

The economic benefits of owning one's home include potential wealth accrual and certain tax benefits.[7] The Survey of Income and Program Participation showed "home equity accounts for the majority of the net wealth of owners" and that "the net wealth of young homeowners is over 14 times that of renters."[8] Tax benefits, specifically the mortgage interest deduction allowed for federal taxes, represent a substantial benefit to homeowners. Economists also note the tax savings associated with imputed rent. They argue that owners essentially pay rent to themselves without paying taxes on this income.

Homeowners are said to experience a host of social psychological benefits which include increased self-esteem,[9] increased sense of control over life events,[10] and greater overall life satisfaction.[11] These benefits reflect the attainment of a culturally valued goal, command over one's living space, and the high status given ownership by our society.

High home-ownership rates purportedly serve broad societal goals. Home owners are thought to maintain and invest in their property at a higher level than do renters. Research also indicates that homeowners may be more likely to participate in civic activities such as voting and joining neighborhood associations.[12]

The perceived benefits of homeownership encourage policymakers to provide ownership opportunities to low- and moderate-income households as they are less likely than middle- or upper-income households to achieve ownership without some assistance. The effort to assist these households to buy homes appears, on the face of it, to be sound public policy. The potential gains of this policy, however, need to be weighed against the potential pitfalls.

The financial position of the target population may present difficulties for a low- and moderate-income homeownership program. Typically, lower-income households lack savings for a down payment and their incomes fall short of the minimum to meet conventional underwriting standards. Although a homeownership program may provide the down payment and underwriting criteria may be relaxed, lower-income house-

holds may experience difficulty in meeting the long-term financial obligation of a home for several reasons. First, income stability might be an issue for some lower-income households. Many of the employment opportunities for these households are hourly wage positions or seasonal jobs which lack advancement opportunities and stability over time. As a result, household income may not keep up with inflation or even worse, be cut off during times of unemployment. Second, home repair and maintenance can be costly and lower-income households tend to have little or no savings. Without savings to draw upon, a home-owner has two choices: ignore the physical condition of the house or redirect available income from another need or obligation to make the repairs. Deterioration of the structure results in loss in value or net wealth, so the household loses the benefit of the house as a savings vehicle. And, redirection of income from another need or obligation such as food, clothing, or utilities results in a lower overall quality of life.

Another potential disadvantage for lower-income home buyers is the location of their housing choices. Affordable homeownership opportunities are likely to be in less desirable neighborhoods with limited potential for appreciation. Among other things, price reflects the location of housing in relation to services and employment opportunities and the overall quality of the neighborhood. Distance from services and employment might make daily life difficult and present burdensome travel costs for the lower-income household. The quality of the neighborhood also could influence housing appreciation. Even if the house itself is in good condition, location in a marginal or declining neighborhood might result in stagnated appreciation of the home.

The financial issues associated with lower-income homeownership programs may affect any social psychological benefits received by the individual. If the home-owner fails to maintain the home or loses the home through bankruptcy or foreclosure, increases in self-esteem, sense of control, and life satisfaction may be lost and the individual may feel worse off than before the home purchase. In addition, if the home fails to appreciate or maintain its value, the owner may feel deprived of the benefits enjoyed by others in the community.

Policymakers need to assess the potential costs and benefits of low- and moderate-income homeownership policies and programs. However, the impacts of such policies and programs depend on many variables including the demand for these types of programs, the available resources, the planning of programs, and the administrative structure of the programs including intergovernmental coordination. In the next section, we discuss homeownership in North Carolina and identify some of the programs designed to assist lower-income households to achieve ownership in the State.

North Carolina: Homeownership Patterns and Trends

The homeownership rate in North Carolina of nearly 68 percent exceeds the United States rate by approximately four percent. However, the rate of homeownership varies among regions within North Carolina. At 75.4 percent, the Mountain region in the western part of the State has a substantially higher homeownership rate than either the central Piedmont region (66.5 percent) or the eastern Coastal region (67 percent). Over the last decade, the rate of homeownership dropped by 1 percent in the Piedmont region, by 0.4 percent in the Mountain region, and rose by 0.6 percent in the Coastal region.[13]

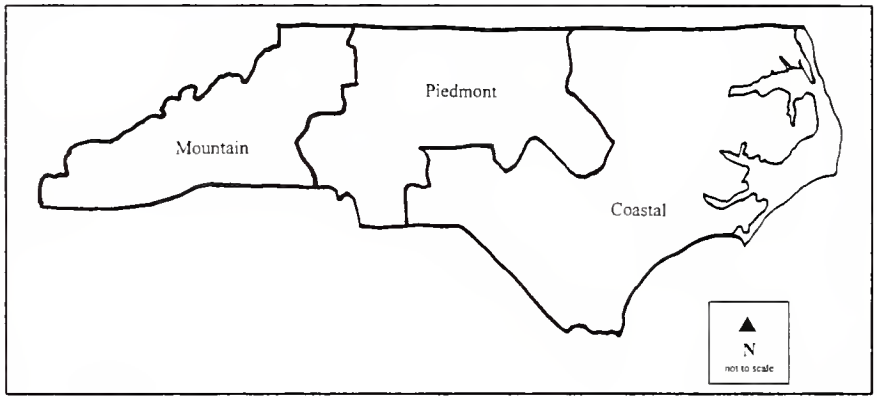


Figure 2: Regions of North Carolina.

The differences in homeownership rates among regions are due in part to the urban/rural cleavage within the State. As reflected by county population densities, the Piedmont area is by far the most urban region in the State, while the Coastal and Mountain regions are predominantly rural.[14] At least two factors account for the difference in homeownership rates between urban and rural communities. First, housing prices in urban areas tend to be higher than in rural areas. For example, rural dwellers own more mobile homes, a lower cost alternative to stick-built housing, than do urban residents.[15] Second, urbanized areas

often act as magnets for job seekers of varying socioeconomic levels. The competition for housing between lower- income households and more affluent households often leaves the less well-off with fewer ownership opportunities.

Variation in homeownership rates also exist among racial and ethnic groups in the State. As shown in Table 1, white households have the highest homeownership rate in North Carolina followed by Native American, black, Asian, and Hispanic households. Homeownership rates increased for both white and Native American households from 1980 to 1990, but other groups show a decline in ownership over the same period.

Table 1. North Carolina Homeownership Rates by Race and Ethnicity, 1980 and 1990

	1980	1990
White	72.8%	72.9%
Native American	64.0%	66.3%
Black	51.0%	49.6%
Asian	49.9%	48.1%
Hispanic	48.7%	41.7%

Source: U.S. Department of Commerce, Bureaus of the Census

The rate of homeownership varies across income levels in the State. As might be expected, households making less than $20,000 annually have a much lower ownership rate compared to households with incomes at or above $20,000. In 1989, lower-income households (less than $20,000/yr.) comprised roughly 37 percent of the households in North Carolina;[16] however, these households represent only about 26.5 percent of the owner occupants in the State.[17] The median income of owners versus renters is another indicator of the relationship between income and homeownership. The median household income for owner occupants in 1989 was $31,369, while the median for renters was $18,115.[18]

Other factors such as the age of the population and familial status may affect homeownership rates in North Carolina. In the nation as a whole, for example, single person and younger- headed households tend to have lower ownership rates than married and older-headed households.[19] The 1990 Census data for the State suggest that a similar pattern of ownership by age and familial status holds within North Carolina.[20]

The patterns and trends of homeownership within the State are also a result of an interaction among factors already mentioned. For example, a lower rate of homeownership among minorities may be due to discrimination in the housing market and the tendency for minority households to have lower incomes, on average, than whites. Likewise, urban demographics including age, race and ethnicity, and lifestyle may interact with income to contribute to lower home-ownership rates in cities.

Government efforts to increase home-ownership rates focus primarily on two of the factors associated with lower rates of ownership: unfair housing practices and affordability issues. In North Carolina as in other states, these efforts typically involve several levels of government. The U.S. Department of Housing and Urban Development (HUD) has stepped up enforcement of lending requirements and fair housing laws to address discrimination in the housing market.[21] In addition, HUD develops programs and provides funding for homeownership programs administered at the federal, state, and local levels. These programs include the Veterans Administration Home Loan Program which provides lower interest loans to veterans of U.S. military service and the Homeownership for People Everywhere 3 (HOPE 3) program which provides opportunities to low-income households to purchase single-family housing.[22]

The State of North Carolina prepares a Comprehensive Housing Affordability Strategy (CHAS) as required by HUD to receive Community Development Block Grants (CDBG) and HOME funds. The CHAS

offers an analysis of housing needs within the State and presents policies to address these needs. The current CHAS, covering the years 1994 to 1998, outlines the State's housing priorities; several of which are aimed at facilitating homeownership within the State. Among others, the CHAS lists the following priorities:

- Assist Very Low-Income Existing Home Owners[23]
- Assist Low-Income Existing Home Owners
- Assist Low-Income First-Time Home Buyers[24]
- Assist Very Low-Income First-Time Home Buyers[25]

These priorities acknowledge the need to address the gap between the cost of purchasing and owning a home and the resources of lower- income households. This gap is the most frequently identified barrier to ownership by housing professionals and potential home buyers. A national survey, for example, reported that 51 percent of renters identify a lack of financial resources as a major obstacle to homeownership.[26]

Table 2 outlines many of the homeownership programs listed in the CHAS with programmatic responsibilities by level of government. Some programs may be entirely funded and operated at one level of government, while other programs may require local matching funds or in-kind contributions. Several of these programs also involve the participation of nongovernmental organizations such as lending institutions and nonprofit development corporations.

Support of homeownership programs is clearly evident at all three levels of government. The federal government continues to actively support homeownership policy despite an overall trend to downsize operations. HUD Secretary Henry Cisneros recently stated his desire for "the creation of 7 million new homeowners from 1995 through 2000."[27] In North Carolina, the State Housing Finance Agency (NCHFA) administers several homeownership programs including experimental projects. The NCHFA, for example, developed a pilot homeownership program to encourage employer-assisted housing in the State. In one joint venture with the City of Greensboro, city employees meeting program qualifications received partial down payment assistance from both the City and the NCHFA. The NCHFA assistance was in the form of a deferred second mortgage equal to 25 percent of the down payment and 25 percent of the prepaid expenses and closing costs.[28]

Greensboro is just one of many local governments in North Carolina to provide some type of homeownership

Table 2. Selected Homeownership Programs in North Carolina

Program	Federal			State			Local		
	Funds	Administers	Implements	Funds	Administers	Implements	Funds	Administers	Implements
HOME Investment Partnerships	X				X		X	X	X
Home Ownership for People Everywhere I, 2, & 3	X	X							X
Veterans Administration Home Loan Program	X	X	X						
Employer Assisted Housing Pilot				X	X	X			
Home Ownership Challenge Fund				X	X		X		X
Maxwell/Fuller Self Help Housing Program				X	X				X
Mortgage Credit Certificate				X	X	X			
Single Family Mortgage Loan Program				X	X	X			
Community Development Block Grant	X				X			X	X
Downpayment Assistance							X	X	X
Second Mortgages							X	X	X

Source: Adapted from North Carolina CHAS 1994-1998

assistance.[29] In a survey of cities in the State, over 96 percent of the 26 responding cities reported operating at least one homeownership assistance program in fiscal year 1992-93 and over 60 percent operated two or more homeownership programs.[30]

The effort to bring affordable homeownership to citizens of North Carolina involves a broad, innovative, and often complex mix of actors, funds, and program designs. Often, the responsibility for coordinating homeownership programs falls to housing professionals at the local level. In the next section, we take a look at the homeownership goals and programs in two cities in North Carolina.

Homeownership in Two Cities: Charlotte and Durham

Many cities in North Carolina offer some form of homeownership assistance. In order to better understand the approaches used by local governments to increase homeownership, we focus on two cities within the State, Charlotte and Durham. Although we observed very different homeownership approaches in the two cities, we note some similarities between Charlotte and Durham. Both cities are located in the most urbanized region in the State, the Piedmont, and they receive funds for housing through federal entitlement programs such as CDBG and HOME. Also, although it increased from 1980 to 1990, the homeownership rate in Charlotte and Durham is well below the national and Statewide figures (see Figure 1). Finally, professional staff in both cities identified increasing homeownership as a major housing goal.

Charlotte

Charlotte is the largest city in North Carolina with a 1992 population of 416,294.[31] The 1989 median household income in the City was $31,873 with 10.8 percent of persons having incomes below the poverty level.[32] Physical housing conditions were relatively good in 1990 with less than 0.5 percent of the total housing units lacking complete plumbing and less than 1 percent lacking complete kitchen facilities; approximately 3.3 percent of the City's housing units were overcrowded. In 1990, the homeownership rate was 55 percent in Charlotte.[33]

The City has established the following housing goals: "to reduce the number of households living in substandard, overcrowded or unaffordable housing conditions, targeting families earning 80 percent or less of the area median income" and "to expand the public role in addressing housing issues in partnership with private and nonprofit organizations."[34] City staff identified financial obstacles such as lack of savings for a down payment and credit problems as the major barriers to affordable homeownership. Strategies supporting the City's goals include various methods of homeownership assistance. City programs include down payment assistance, mortgage assistance, and homeownership counseling.

However, these City-run homeownership programs tend to be focused on residents displaced as the result of a City property acquisition. The City has an active program to eliminate substandard housing. The City identifies units, purchases them at a market rate price, and then rehabilitates them. In order to undertake the rehabilitation, the residents need to be relocated. For example, after the City acquires a substandard rental property for rehabilitation and disposition, the occupants of the rental units are placed on the City's active relocation list. Some individuals on this list will choose to purchase a house and qualify for financial assistance from the City to buy a rehabilitated, City-owned home.

Charlotte's homeownership policy reflects available funds, the perspectives of the Council members, and the role of the housing staff. Limited local funds and a change in the role of city housing staff from program initiators to technical advisors and coordinators complements the current city housing policy. Instead of city-issued requests for proposals to develop affordable housing for ownership, the city staff works with local nonprofit housing organizations to create homeownership opportunities. In addition to the emphasis on nonprofits, the staff commented that city policy favors the provision of loans over grants to local affordable housing developers, which are primarily non-profit organizations. The specific type of loan and its terms are decided on a case-by-case basis. Lastly, staff stressed the importance of the involvement of private sector financial institutions in producing homeownership opportunities by offering loan products to serve lower-income home buyers.

Charlotte supports homeownership programs with local and federal funds. One city document reports "The housing and related programs are funded by two Federal sources: Community Development Block Grant and HOME, and three local funds: Housing Fund, Innovative Housing Fund and General Fund contribution."[35] However, staff was quick to comment that "local funds are limited now." In addition, staff noted the approval of two city-assisted homeownership projects in 1994 and the staff-written reports to the council, called Requests of Council Action, for these projects identified HOME monies as the source of funding.

Nonprofit housing organizations are the keystone of the current homeownership efforts in Charlotte. Two types of housing nonprofits operate in the City: community-wide organizations and neighborhood organizations. Generally, these organizations serve different purposes. One community-wide organization, the Charlotte-Mecklenburg Housing Coalition (CMHC), although not legally a nonprofit, is a fledgling organization comprised of the many nonprofit housing organizations throughout the community. One nonprofit staff member described CMHC as "a unified voice for affordable housing." A housing professional employed by another nonprofit stated that the CMHC provided a cohesive advocacy group and suggested that "there was strength in numbers." She also commented that CMHC facilitated communication and support among the area nonprofit housing organizations. CMHC offers a platform for exchange and problem-solving dialogue, but the organization does not actively initiate and implement homeownership programs itself.

In contrast, the Charlotte-Mecklenburg Housing Partnership (CMHP) provides a model for a community-wide housing nonprofit organization with programmatic responsibilities. CMHP works with local government, financial institutions, community groups, and others to expand affordable housing opportunities. Homeownership programs administered by CMHP target households with incomes at 80 percent or below the area median. The housing available through CMHP programs is located in specific neighborhoods in the Mecklenburg County service area as well as scattered sites throughout the City of Charlotte. Eligible prospective home buyers receive counseling and training on credit, legal, and budgeting matters through the CMHP Homeownership Program.[36] Financing a home purchase often involves several sources of funds. The buyer contributes a down payment (usually less than conventional standards), first mortgages come from a loan pool created by a consortium of area banks, and the City of Charlotte funds low-interest second mortgages.

Neighborhood nonprofits contribute by providing ownership opportunities in specific target areas. These nonprofits, more commonly referred to as Community Development Corporations (CDCs), generally have a range of objectives which frequently include increasing homeownership in their neighborhoods. Many housing professionals from public agencies and CDCs consider homeownership a vital element of neighborhood improvement. As one city staff member stated, "Homeownership is a method for stabilizing neighborhoods."

Charlotte works closely with CDCs to increase homeownership in neighborhoods throughout the city. City staff provide technical assistance such as help in grant preparation and facilitation of communication among city departments. Also, staff evaluates requests for funds from CDCs. To an outsider, the city funding process may appear ad hoc, since the city neither issues specific requests for proposals nor possesses a formal process for review of unsolicited proposals. However, city housing staff argue that flexibility in the process allows the neighborhood advocates to propose their vision of their neighborhood instead of a top-down approach mandated by formal criteria and standards set by the City.

Charlotte's policy approach to meeting its goal of increasing the homeownership rate remains untested. Many of the CDCs are young organizations proposing or just beginning their first homeownership project. Only after considerable time has passed will Charlotte be able to evaluate its approach. However, housing staffs at both the City and nonprofits agree that increased homeownership offers hope to declining neighborhoods. As one housing professional commented, "We see homeownership as a way to get back lost communities."

Durham

The City of Durham with a 1992 population of 140,926 is the fifth largest city in the State.[37] Although Durham's 1989 median household income of $27,256 was slightly higher than the statewide median income, the percent of individuals below the poverty level in the City was higher than the State figure (14.9 percent and 13 percent respectively). Indicators such as units lacking complete plumbing (0.4 percent), units lacking complete kitchen facilities (0.8 percent), and overcrowded units (3.1 percent) suggest good housing conditions in the City. Durham's 1990 homeownership rate of 44 percent, however, was much lower than the statewide rate of 68 percent.[38]

City staff identified two primary housing goals in the city: to reduce the number of substandard housing units and to increase the rate of homeownership. Staff noted that, whenever possible, City housing programs address both goals concurrently. Several city projects involved the rehabilitation of existing units for rent-to-own or immediate sale to lower-income households.

City staff cited limited financial resources and the geographic desirability of available housing as two barriers to low- and moderate-income homeownership in Durham. The city addresses the former obstacle in a multitude of ways including financial assistance to potential buyers in the form of deferred second mort-

gages. These second mortgages essentially provide the down payment for the home purchase. For example, to qualified households making less than 60 percent of the area median income, the city provides a second mortgage equal to 20 percent of the sales price of the home with the remainder of the sales price borrowed from a private lender. Qualified households making 60 percent to 80 percent of the area median income may receive a non-deferred second mortgage of 5 percent of the sales price. The latter barrier, geographic desirability, refers to the availability of homeownership opportunities in stable, safe neighborhoods. Homeownership opportunities for lower-income households often exist in declining or marginal neighborhoods. The lower-income buyer may be reluctant to invest in an unstable neighborhood and even more resistant to raising their children there. City efforts to stabilize and turn around a neighborhood include bringing a group of new home owners to the area at one time. The belief is that the influence from this critical mass of new owners will spread to the surrounding neighborhood.

Housing professionals, political representatives, and Durham residents support affordable housing efforts. Voters have shown their backing for affordable housing by passing general obligation (GO) bond referenda in 1986 and 1990, which included affordable housing program funds. County voters passed a 1986 GO bond which also included affordable housing monies. In total, the bond proceeds provided $23 million for affordable housing programs in the City and County.[39]

Bond proceeds and other sources provide funds to the wide range of homeownership projects and programs sponsored by the City. Of the bond monies allocated through fiscal year 1993-94, 48.1 percent went to homeownership programs.[40] Durham also funds homeownership efforts with federal assistance through the Community Development Block Grant and HOME programs.

Nonprofit housing organizations in Durham participate actively in housing efforts including provision of homeownership opportunities. An umbrella nonprofit organization, the Durham Affordable Housing Coalition (DAHC), facilitates communication among the other housing nonprofits in the City. In addition, DAHC pursues its own projects ranging from the analysis of discriminatory housing practices to homeownership counseling. Many nonprofit housing organizations in Durham act as developers on projects. Some of these nonprofits, with financial assistance from the City, rehabilitate or construct homes for sale to lower-income households.

The City of Durham has a formal process to evaluate proposals from nonprofit as well as for-profit developers. The City issues requests for proposals with a deadline for submission. City staff evaluate the proposals using various criteria including a match with needs, small area plans, and any conflict or incompatibility with existing programs. Evaluation of the proposals at the same point in time creates a competitive environment and allows staff to rank the proposed projects.

A house in the Brighton Subdivision, Durham, North Carolina.

The City of Durham attacks affordable housing problems, including homeownership, along all fronts. A diversity of program types and multiple project sponsors add to the success of housing efforts in Durham. Nonprofit and City-sponsored housing projects represent approximately 75 percent of total allocated bond

funds during fiscal year 1993-94. The other 25 percent of the allocated funds went to for-profit development projects.

The Brighton development offers an example of a joint effort between the City and for-profit developers to create affordable homeownership opportunities. The City purchased a failed subdivision held by the Resolution Trust Corporation with bond proceeds and contracted out infrastructure improvements. The Durham-Chapel Hill Home Builders Association selected nine developers to build homes with a sales price of about $80,000. Nine model units opened in November, 1994 and another 45 units are planned. A reasonable sales price and financial assistance to buyers from the City of Durham make these new homes affordable to lower- income households.

The multiplicity of programs and approaches to affordable homeownership in Durham reflect the community's ongoing commitment to increasing ownership opportunities. Additional bond support for affordable housing may be necessary to meet City goals; however, staff foresees a future where housing efforts will be self-supporting from revolving loan funds.

Conclusion

The popularity of homeownership and the benefits attributed to it by our society have resulted in the rapid development of many low- and moderate-income homeownership programs. These programs involve many actors in both the public and private sector as well as different types of assistance. Publicly sponsored programs may involve national, state, and local resources and the program process may be highly structured as in Durham, or more informal as in Charlotte.

The apparent zeal for homeownership as reflected in widespread approval of homeownership policies leads us to note several issues concerning the creation of low- and moderate-income homeownership programs. All of our concerns have to do with planning community housing programs. First, policymakers should recognize that not everyone can be a homeowner. Homeownership programs should be one component of an overall strategy toward decent community housing for all. If needed, other types of housing assistance, especially for very low-income households, should not be eliminated in favor of homeownership programs. Second, homeownership may be feasible, but difficult, for some lower-income households. The potential pitfalls of homeownership as discussed in this paper need to be considered in program development. By recognizing the types of problems lower-income households might experience as home owners, program sponsors can build solutions into the program design. Third, community homeownership programs should include an evaluation component. As Ross Comer notes, "...evaluation can provide information about the processes and effects of specific local programs for ongoing, formative decisions as well as for longer-term, summative judgements."[41]

Our last point about program evaluation is crucial to the effectiveness and efficiency of homeownership programs. Without evaluation, a sponsor can not assess if a homeownership program or elements of that program are working. Evaluation offers a way to judge program success by matching program objectives to quantifiable indicators.[42] Results from program evaluation help policymakers determine the value of the program and provide information to program planners in other communities about specific aspects of homeownership programs. CP

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Notes

[1] Quote from Crabgrass Frontier by Kenneth T. Jackson (1985). New York: Oxford University Press, p.50.

[2] Mitchell, 1985; Rohe and Stegman, 1994a.

[3] Saunders, 1990; Kemeny, 1981.

[4] Apgar, Masnick, et.al., 1991; Jackson, 1985.

[5] Joint Center for Housing Studies, 1992; National Association of Realtors, 1992.

[6] Jackson, 1985.

[7] Mitchell, 1985; Rohe, 1993.

[8] Joint Center for Housing Studies, 1992, p.15.

[9] Cooper, 1972.

[10] Saunders, 1990.

[11] Rohe and Stegman, 1994a.

[12] Cox, 1982; Rohe and Stegman, 1994b.

[13] Rohe, Basolo, and Liu, 1993.

[14] North Carolina Rural Economic Development Center, 1992.

[15] Housing Assistance Council, 1984.

[16] The gross numbers used for these percentages came from two separate Census tables. Income ranges in these tables were not identical, therefore, we assumed an even distribution within the lower-income ranges and divided observations accordingly. In other words, these figures are only rough estimates based on our interpolation.

[17] This figure is based on "specified owner-occupied housing units" as opposed to all owner-occupied housing units. The Census Bureau defines specified owner-occupied housing units as "owner-occupied one-family houses on fewer than 10 acres without a business or medical office on the property" (p. B-45).

[18] U.S. Department of Commerce, 1992a.

[19] Apgar, Masnick, and McArdle, 1991.

[20] We say the data only suggests these patterns of ownership because of the assumptions that must be made to determine the patterns as well as the way the data are reported. For example, an analysis of ownership by age varies based on the threshold used for older-headed households. If the age threshold is 34, then the 1990 figures clearly show older headed households (i.e. 35 and over) own their homes at a higher rate than younger households. Also, the Census Bureau reports occupancy by number of persons in the housing unit. From this data, we can say that in North Carolina in 1990, households with more than one person owned their housing unit at a higher rate than one person households.

[21] HUD, 1994.
[22] North Carolina Housing Finance Agency, 1994; HUD, 1991.
[23] Very low-income is defined as households at 0-50 percent of the HUD adjusted median family income.
[24] Low-income is defined as households at 51-80 percent of the HUD adjusted median family income.
[25] North Carolina Housing Finance Agency, 1994, CHAS Five Year Strategy, p.1.
[26] National Association of Realtors, 1992.
[27] Warren, Gorham, and Lamont, 1994, p. 275.
[28] Basolo, 1992.
[29] It should be noted that the housing efforts of county governments in North Carolina are somewhat curtailed due to the lack of enabling legislation allowing the direct funding of housing programs by counties (North Carolina Housing Finance Agency, 1994).
[30] The North Carolina Cities Housing Survey was conducted in Spring of 1994 by Victoria Basolo as part of a larger study. Based on 1990 Census Bureau figures, the number of cities with a population of 10,000 persons or greater equals fifty. All 50 cities received the questionnaire and a follow-up reminder with another copy of the questionnaire. The overall response rate to the survey was 58 percent (n=29).
[31] U.S. Department of Commerce, 1994.
[32] The definition of "below the poverty level" involves a baseline income needed to meet a Department of Agriculture economy food plan. Income categories reflecting family size and age composition of the family establish poverty thresholds. The Census Bureau compares the respondent's (family or individual) total income to the thresholds and assigns individuals not meeting the thresholds to "below poverty level" status. Although the poverty thresholds are adjusted annually to take into account changes in the Consumer Price Index, the thresholds are based on national figures and do not reflect regional variations (U.S. Bureau of the Census, 1992).
[33] U.S. Department of Commerce, 1992b, 1992c.
[34] City of Charlotte Neighborhood Development Department, 1994.
[35] Charlotte Neighborhood Development Department, 1994.
[36] Homeownership counseling and training is supported through a grant from the City of Charlotte.
[37] U.S. Department of Commerce, 1994.
[38] U.S. Census Bureau, 1990.
[39] The County of Durham includes the City of Durham and other unincorporated areas. Planning functions including housing services for the two entities are performed by the joint Durham City/County Planning Department.
[40] Durham City/County Planning Department, 1994.
[41] p. 112.
[42] Rossi and Freeman, 1989.

Public Participation in Transportation Planning in Greensboro

Richard Atkins, Terry Bellamy, Don Bryson, and Elizabeth James

The planning procedures involved in providing transportation within urbanized areas have undergone a major transformation with the creation of the Intermodal Surface Transportation Efficiency Act (ISTEA) and the Clean Air Act Amendments (CAAA). Both include specific mandates that require administrators to develop a public involvement process that solicits meaningful and timely input from the general public. In accordance with these requirements, the Metropolitan Planning Organizations (MPOs) are required to promote increased community and private sector participation in all areas of transportation planning. To meet these requirements, the Greensboro Department of Transportation has changed their approach towards public involvement through the development of several innovative concepts. This paper will describe several case studies that illustrate these concepts.

As stated in the Federal Register, "Public involvement processes shall be proactive and provide complete information, timely public notice, full public access to key decisions and opportunities for early continuing involvement."[1] As with ISTEA, a total innovative public involvement process must be developed. It should allow the public to play a major part in the decision-making process of transportation related issues. In contrast, the traditional methods of planning allow for public comment and consideration after a major decision has been made and a "hard sell" is made to citizens for implementation. With the growing trend of citizens pro-actively making their local governments and communities more responsive to their needs, the end result of the traditional process has been one of increasingly negative and pessimistic sentiment. The empowerment of citizen groups has become the wave of the future and active participation in the decision-making process is no longer a wish; it has become an expectation.

The new transportation planning process seeks to develop new partnerships. It is predicated on early and inclusive public involvement to develop long- and short-range plans. The key words are "early", "inclusive", and "involvement." In order to be effective, public involvement must start early or at the beginning and must be inclusive of all players in the process. Greensboro is striving to meet these objectives.

Description of the Greensboro Service Area

As the county seat, Greensboro is centrally located in Guilford County, which is part of the north-central Piedmont Triad region of North Carolina. Interstate 85 connects Greensboro with Durham to the northeast and Charlotte to the southwest. Interstate 40 connects Greensboro to Winston-Salem to the west and Raleigh and Wilmington to the east. Although only one of several incorporated areas in Guilford County, the City of Greensboro accounted for nearly 53 percent of the county's population in 1990. The other incorporated areas are High Point and Jamestown, southwest of Greensboro, and Gibsonville to the east.

Certain characteristics of Greensboro present challenges to achieving a successful public transportation system. Compared to other North Carolinians, Greens-

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boro residents are relatively affluent, have small households, and display a fairly high incidence of automobile ownership, all of which tend to reduce public transit demand. While there is population growth in the outer areas of the city, much of that growth consists of low-density residential and automobile-oriented commercial land uses. Employment centers are widely dispersed throughout the city and county.

Greensboro's land area and population have increased over several decades. Between 1980 and 1990, the population of Guilford County increased approximately nine percent, while Greensboro's grew about eighteen percent. Annexation accounts for some of this growth; major land acquisitions increased the size of the city from 60.7 square miles to 81.8 square miles.

Like many other American communities, Greensboro's population is aging because of lower birth rates, longer life expectancy, and a baby boom generation which is approaching middle age. Compared with 1980, there are now fewer children and youth (under 19), many more adults between 30 and 45 years of age, and more persons over 45.

Setting the Stage

The City of Greensboro Department of Transportation (GDOT) has always attempted to bring good as well as bad news to its citizens in open transportation planning forums. During a period when environmentalists feel that there are no "good" roads, when the federal government is mandating clean air and water, and when consumers are not willing to give up their automobiles for mass transportation, the transportation professional must be sensitive to a wide range of interests.

In 1985, the Greensboro One Bond Task Force considered various issues and needs facing the community as part of the process of recommending a bond package to be placed before the voting public in the fall of that year. During their deliberations, it became apparent that public participation was needed to measure existing public opinion concerning transportation. At the request of the City Council, the Transportation Planning staff developed a proposal to study existing services and assess the needs and demands within the community. The study was designed to evaluate services against community-based goals and objectives and to offer a set of recommendations or improvements if warranted.

Two committees were formed to design and conduct the study. The Technical Steering Committee, composed of city staff and service providers, with additional representatives from the United Way and the City of High Point, served as advisors for technical evaluation and analysis. The Advisory Committee, composed of politicians, administrators, and private citizens, sensitized the team to public attitudes and needs.

The final study consisted of nine separate tasks:

1. Establish community-based goals and objectives for public transportation in Greensboro,
2. Identify service provider roles and the public they serve,
3. Assess service performance of current providers,
4. Assess the funding environment,
5. Assess the legal environment,
6. Identify alternative service options,
7. Identify alternative organizational structures,
8. Evaluate alternative organizational and service options, and
9. Develop a final report and presentation for the City Council and citizens of Greensboro.

The following case studies provide a representation of the Greensboro Department of Transportation's efforts and commitment towards public involvement in transportation planning.

Case #1: Public Involvement Process for Review and Approval of the Greensboro Urban Area Long-Range Transportation Plan

Under the requirements of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), it is the responsibility of each Metropolitan Planning Organization (MPO), through its Technical Coordinating Committee (TCC) and Transportation Advisory Committee (TAC), to ensure that the public is adequately informed and involved in the metropolitan transportation planning process. In the case of a significant revision or update to the Long Range Transportation Plan (LRTP), the TCC shall recommend a specific Public Involvement Plan (PIP) appropriate for the particular action being considered. Developing, approving, and implementing the PIP will be among the earliest tasks completed in a LRTP revision or update.

The PIP should include provisions enabling the TAC to monitor the progress of the process.

Each PIP shall describe and schedule suitable efforts designed to inform, educate, build consensus, and facilitate a collaborative decision-making process. The PIP will be designed to provide timely information to potentially affected parties (such as public officials, citizens, and other agencies) early in the process and at important decision points along the way. Potentially critical steps in developing the LRTP include:

- Defining community goals and objectives,
- Proposing strategies and policies,
- Reviewing assumptions and projections,
- Identifying deficiencies,
- Establishing evaluation criteria,
- Generating solutions,
- Evaluating alternatives,
- Recommending and prioritizing projects, and
- Approving the final plan.

Special efforts will be made to contact and consider the needs of groups traditionally underserved by transportation systems and underrepresented in the planning process, including but not limited to the elderly, the disabled, low-income households, and minority residents. A variety of techniques will be used to achieve the goals of the public involvement process as effectively as possible. Potential techniques may include:

- Charettes,
- Transportation fairs,
- Interviews,
- Focus groups,
- Polls and surveys,
- Newspaper inserts/articles,
- Commercial radio, television, and public television,
- Newsletters/mailing lists,
- Hotlines,
- Workshops,
- Community/neighborhood meetings,
- Task forces,
- Steering/advisory committees,
- Written comments, and
- Public hearings.

Initial Transportation Advisory Committee (TAC) approval of the PIP shall be required, and the TAC may at any time require such revisions to the PIP as are needed to maintain a full and open process. Adequate public notice shall be given concerning any revision to the PIP. The approved PIP will be documented and made available to the public, and will be included directly or by reference in the final LRTP document, along with a summary of significant comments and responses.

The type and degree of public involvement required to provide effective community input and review for the Long Range Transportation Plan (LRTP) varies according to the action being taken. The specific public involvement process described below should be considered the minimum acceptable level of public involvement.

The essential elements of the public involvement process for the Greensboro Urban Area's Long Range Transportation Plan are:

1. The Greensboro MPO's Technical Coordinating Committee (TCC) and Transportation Advisory Committee (TAC) shall review and comment on the draft LRTP document prior to granting tentative approval. The tentative approval shall be subject to public comments forwarded to the TCC and the TAC during the public review period.

2. Copies of the draft LRTP will be made available to the public in the City Clerk's office, the County Commissioners' office, and the GDOT office. The public review period shall be thirty days. A notice will be placed in the major local newspapers for seven consecutive days at the beginning of the 30 day comment period preceding review and action by the TCC and TAC. The notice will include a due date for comments, locations of draft LRTP's, and a contact person with an address and telephone number. All comments should be in writing. A public meeting at the end of the 30 day period is at the option of the TAC. The notice for a public meeting

should be placed for three consecutive days at least one week prior to the meeting, and will include a date, location, and contact person.

3. At least one Greensboro MPO staff person shall be designated to answer questions from persons or groups concerning the LRTP.

4. Relevant information will be provided in a timely manner to any citizens, public agencies, private providers of transportation services, or other parties or segments of the community identified as being significantly affected by the proposed actions.

5. Public comments shall be assembled and presented to the Greensboro Urban Area TCC and TAC. Response to the public comments shall be prepared at the discretion of the TAC.

When a significant number of written or oral comments are received on the draft LRTP, the Greensboro MPO shall prepare a report summarizing the public comments and their analysis and disposition. This report shall be submitted along with the final LRTP document to the Federal Highway Administration, the Federal Transit Administration, and the North Carolina Department of Transportation (NCDOT), and made available to other parties upon request.

After reviewing public comments, the TCC and TAC shall meet to consider approval of the final LRTP document. If the final LRTP or action differs from what was made available for public comment to a degree that raises new and unforeseen material issues, additional opportunity for public comment will be provided.

The Greensboro MPO's public involvement process will be coordinated with NCDOT's statewide and project-specific public involvement plans whenever possible to enhance public consideration and reduce costs, redundancies, and confusion. This Public Involvement Process will be evaluated periodically to determine its effectiveness, and revised as necessary to provide full and open access. Any revision to the PIP will require a 45 day public review and comment period.

Case #2: Citizen Participation in the Greensboro Transit Authority

Beginning in 1934, the transit division of Duke Power Company provided bus service for the City of Greensboro under a 99-year franchise agreement. In the early 1980s, a number of transit studies determined that transit service levels and quality needed vast improvement. To encourage public participation, numerous public hearings were held regarding this issue. In 1988, Greensboro citizens confirmed their strong support for improved public transit by voting to pass a referendum allocating monies to support the creation of the Greensboro Transit Authority (GTA).

Since its inception, the GTA has dedicated itself to actively encouraging public participation on a continuing basis through the use of interviews, surveys, public hearings, site visitations, and informational meetings. Many changes and improvements in the GTA system are the direct result of citizen input—considered to be an invaluable source of guidance for the system.

On July 1, 1991, the GTA, under the direction of the Greensboro City Council, assumed full responsibility for the operation and future direction of Greensboro's public transit system. In order to meet its commitment to enhance the quality of service and expand the transit service area to meet the needs of a growing Greensboro, GTA reached out to the community to help identify their requirements. GTA did this in a number of ways. First, it conducted extensive ridership surveys on the buses regarding the quality of service and desired changes. Second, it interviewed local businesses to determine employer and employee needs. Third, GTA held a series of focus groups with riders and nonriders to identify unmet transit needs, potential destination sites, and public perceptions of service. Lastly, GTA hosted public hearings to determine possible route, time and destination changes.

Meanwhile, market research allowed the GTA to review and revise routes and schedules to reflect shifts in population density, changes in demand, and new development. All of the information gathered led to GTA's adoption of four major service improvements, which include: expanded service hours, service to new areas, improved headways and increased route efficiency. The system was further designed to provide on-time service to a wide range of requested destinations, including entertainment sites, cultural centers, and schools. GTA also responded to community requests for increased frequency of service, later running hours on certain routes, and service to a local community college.

On October 7, 1991, GTA rolled out 22 new state-of-the-art buses, officially launching its expanded public transit system. Each bus is accessible, with a wheelchair lift and "kneeling" feature for persons with special mobility needs. All buses are also in compliance with current EPA particulate emissions standards. Passengers are able to ride in comfort during the summer months with the addition of air conditioning,

which was not available on the Duke Power buses.

The Greensboro Transit Authority's marketing focus also emphasizes citizen input and participation. From the initial GTA kick-off event, the public has been an essential and invaluable partner in forming and developing marketing strategies. Indeed, the primary mission of marketing efforts is to communicate ideas to others. GTA has taken this concept one step further and has listened to the public's ideas in order to better serve them.

Initial marketing efforts involved a concerted campaign to inform Greensboro citizens of the new and improved transit service. This consisted of creating strong positive awareness of the new system and its benefits; educating the community about useful new features of the service; and overcoming negative perceptions regarding the Duke Power service which had resulted in low ridership. A wide range of media was utilized to reach extensive portions of Greensboro citizens with a high-visibility, community-oriented message emphasizing the benefits of public transit. Presentations to civic groups, displays at cultural events, participation in parades and fairs, and talks to school groups reinforced GTA's message to the community. GTA is proud of the level of community involvement utilized in marketing its system. Greensboro's citizens continuing contributions will allow the Greensboro Transit Authority to accelerate into the 21st Century offering excellence in service to the entire Greensboro community.

Case #3: The Greensboro Transportation Exposition

On October 10, 1994, the first Transportation Exposition was held at the Greensboro Coliseum Special Events Center. The event was hosted by the Greensboro Urban Area Transportation Advisory Committee and the local policy body of the Metropolitan Planning Organization.

The Greensboro Department of Transportation was designated to serve as the lead planning agency for coordinating this event. Local staff members were asked to develop a sketch of the way a transportation fair or expo would be organized. A transportation fair or expo is an event used to interest citizens in transportation planning and to provide them with the opportunity to learn about and comment on transportation projects.

Normally held for one day, the event should be heavily promoted with local media coverage (television, radio, and newspaper). The expo should also utilize visual exhibits, videos, maps, and models of projects and processes. At a minimum, the expo should include the following:

- Visual interest and excitement,
- Variety in exhibits: maps, photos, models, slide shows, videos, full-sized vehicles, and gift items,
- Accessibility in a central location for the target audience,
- Extensive publicity to attract participants,
- Attraction for a variety of people of all ages, and
- Opportunities for comments by participants.

The 1994 expo was divided into two main components: (1) visitation of events and exhibits, and (2) active participation through panel discussion and interaction with local officials. This two-stage process was programmed to allow the exhibits to be visited for the duration of the event, and the interactive sessions to take place during the evening hours to allow working individuals an opportunity to take part. The total process involved video cameras, Q&A stations, and ongoing recording by local transportation groups of the public's comments, suggestions, and concerns. The information collected will serve as a review and critique of the event as well as a guide for planning future activities of this nature.

Public participation at expo events can be predicated on several factors: weather, day/date, location, and awareness. Contact was made with several special interest groups throughout the city to raise their awareness as well as seek input regarding items, exhibits, and discussions. At best, a small representation of citizen groups was expected and did attend. Other groups invited to participate included: Volvo-GM, Epees Trucking, Sierra Club, and the local Institute of Transportation Engineers chapter from North Carolina A&T State University. Citizen groups that attended the expo closely examined the information gathered and are expected to bring follow-up comments to an open interaction session scheduled later.

Description of the Expo

Starting at noon on the day of the expo, the public was invited to see, feel, and learn about the many transportation matters operated by the City of Greensboro. Many pieces of heavy equipment used in the daily operation of the department were on display, including asphalt equipment, snow plows, leaf trucks,

and sign-marking trucks. The Greensboro Transit Authority offered schedule information, bus passes, and opportunities to review their handicapped accessible transit bus. The North Carolina Department of Transportation presented safety exhibits, public transportation and rail information, congestion technology, and motor vehicle registration information.

Beginning at 6:30 p.m., three interactive panel discussions were presented over a three-hour period. The first session focused on the status of all state and local transportation projects in the Greensboro area. The panel included a spokesperson from NCDOT, a local traffic engineer, a city engineer, a project planner, and the transit administrator. The second session was a review of the current ISTEA efforts, including explanations of metropolitan planning, project selections and funding, and necessary public involvement. The makeup of this session included a statewide planning engineer, a local traffic engineer, and city budget and evaluation administrators. The third and final session dealt with an overview of the various transportation-related planning efforts underway at the local, regional, and state levels, with emphasis on coordination and citizen participation. Key players in this session included the Mayor Pro-Tem, city and county engineers, Council of Government officials, and statewide planning engineers. All sessions were moderated by representatives from city and county government. As noted earlier, these sessions were open, with opportunities for the public to raise questions concerning specifics of various projects.

Special emphasis in these sessions was given to the presentation materials. All presenters agreed on using computer-generated presentation software, and handouts of the computer-generated visuals provided participants with easy reference for questions and comments. While budgetary expenditures were minimal, the staff time and resources involved were extensive. The largest costs were associated with facility and equipment rental. Dedicated staff support was considered essential in the final stages of this process as well as during the actual event. Organizational meetings were essential for fine-tuning the solicitation of exhibitors and publicity.

Analysis and Recommendations

This type of event cannot replace the public process that records statements in a formal manner for the general public. It does, however, provide a complement by providing an informational basis about the many varied operations and procedures of transportation. This event serves as a high-impact informational tool for discussion by the public. As recognized by various transportation administrators, the major reason that the public has not had a large impact in the planning process is simply because they are not aware of the total picture. An event of this nature stimulates awareness and understanding.

A major consideration for our next expo is the need to plan earlier for this type of event. Outside agency participation is highly contingent on requesting an activity of this nature on their yearly schedule. The dividends of this small task should provide flexibility during the selection of activities for public participation. Early organizational meetings with representatives from all phases of the event are essential.

Director's Comments

Richard Atkins, Director of the Greensboro Department of Transportation, viewed these public participation projects as the trend of the future. The highly technocratic engineer is now being replaced by a customer relations planner/engineer that can deal with the general public using layman's terms. The word "advocate" is no longer a term used exclusively by land use planners, but rather is being used universally in the development of transportation systems.

Transportation is typically one of the larger planning functions that does not normally allocate funds or resources to educate the public on the process. Many citizens do not understand the complex requirements of transportation planning and usually do not get involved in the selection of transportation projects. Most citizens are involved in transportation planning only when proposals have turned into a project, and many of them do not realize the magnitude of transportation services that the community receives, including: street maintenance, street cleaning, snow removal, leaf collection, drainage, dead animal pickup, signs and markings, signal maintenance and construction, and public transportation. The Greensboro Department of Transportation staff desires to continue to develop a process that encourages the public to be more involved in the transportation process. Ultimately, citizen participation will improve the provision of quality transportation. CP

Notes

1. 23 CFR 450 and 49 CFR 613.

Planning City Entryways: Highway Corridors in Raleigh

Marion F. Clark

This article describes the planning and design process used by the City of Raleigh to create and implement a plan to enhance the visual and natural resources of one of the city's entryways. The plan blends land use, transportation, and visual resource recommendations in order to clear up strip development, expand the industrial land use base, and improve transportation along the corridor.

During the past twenty years, the City of Raleigh has experienced a continuous stream of demographic and economic growth. This growth is partially attributable to the close proximity of the Research Triangle Park, which provides an abundant source of industrial and governmental research employment opportunities. These service sector employment opportunities attract residents who are interested in the amenities offered by municipalities in the region. The City of Raleigh, with plentiful natural and cultural resources, has absorbed much of the growth brought by the Research Triangle Park. As a result, a sleepy southern city centered predominantly on state government has been transformed into a thriving municipality faced with new environmental, economic, and infrastructure concerns. The city leaders and citizenry have been dedicated to accommodating growth while retaining the charm of the southern cultural and natural heritage.

In 1989, the Raleigh City Council responded to a groundswell of public dismay at the visual and functional condition of the highway corridors around the city. They directed the planning staff to undertake a study of the major corridors of the city. The goal of the study was to determine the best possible way to integrate efficient transportation, effective land use, and valuable visual and natural resources into corridors capable of projecting a positive image of the city as a pleasant place to live and work.

The five highway corridors selected for study were U.S. 70 W, U.S. 401 N, U.S. 401 S, U.S. 1 N, and U.S. 64 E. The first corridor addressed in full was U. S. 64 E, which served as a prototype for the other corridor studies. The U.S. 64 E study produced an inventory of existing conditions, a recommended plan for transportation, land use, and visual resources, recommendations for implementation of the plans, and new legislation. This was the first plan conducted in the city that included a visual resource element.

The charge from the City Council for U.S. 64 E was to clean up strip development, promote higher density housing, and broaden the industrial land base while increasing capacity and providing controlled access in the transportation system. The four mile long project is located just outside the central core of Raleigh and is bounded on the east and west by two Interstate freeways which circumscribe the city. The visual resource reconnaissance and recommendations are limited to 3000 feet on both sides of the highway.

The Design Process

Visual Resource Inventory

The design process began with an inventory and analysis of existing conditions. The inventory included a topographic, slope, and wetland analysis to determine

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the visual qualities and restrictions of the existing land forms. The western end of the corridor at the intersection of I-440 begins in wetlands and is low in elevation. The rolling Piedmont hills give rise to a ridge, dominant at the halfway point of the corridor and subsiding gradually into the Neuse River near the eastern edge of the project. Wetlands abound adjacent to the Neuse River, on the southeast section of the corridor study area.

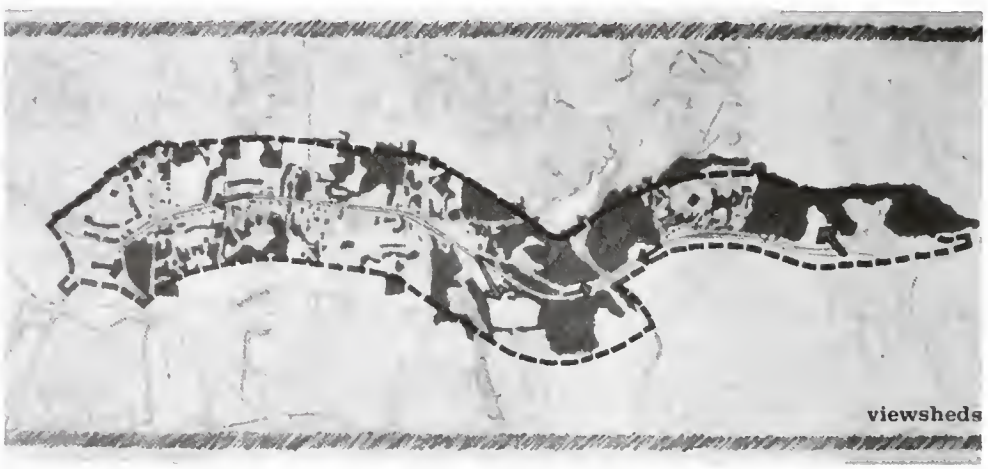
A vegetation inventory and analysis was developed to determine vegetative patterns and the relative economic value of existing vegetation. Stands of trees were classified and valued by chronological occurrence in successional order. For instance, the 25 to 50 year old pine growths are considered less valuable than a stand of mature bottomland hardwoods which may be over one hundred years old. Specimen trees of unusual size or species were also indicated. Clusters of mature hardwoods emerged as a pattern along the length of the corridor on both sides. These small groups of trees, typically oaks or pecans, were planted by farmers in the previous century to protect farmsteads from the heat of the summer and the northerly winds of winter.

Another inventory item was the figure ground relationship, or the solids and voids of the space surrounding the highway. This revealed the location, density, and pattern of development, open space and vistas, and major tree stands. The western half of the corridor has the distinct character of commercial strip development. Small buildings surrounded by parking lots and massive parking lots framing shopping centers speckle the landscape. A required building setback of 50 feet drives this development form by causing developers to push buildings away from the road and place parking lots visible to patrons in front of the development. The spatial edge of the highway created by the original tree line has been moved back 300 feet and replaced with the shredded spaces of strip development. The eastern half of the corridor is largely undeveloped and heavily wooded.

The last inventory item to be mapped was the circulation system. Greenways, bikeways, highway median cuts, and driveway aprons were recorded. The number and frequency of driveways was much greater on the south side of the corridor. This corresponded to the smaller buildings and greater fragmentation of spaces seen in the figure ground analysis. Convenience stores, gas stations, and auto repair shops were the dominant land uses on the south side, located for the convenience of homeward bound shoppers. The north side of the corridor was developed with larger retail and commercial uses such as shopping plazas.

Visual Resource Plan Design Recommendations

The findings from the visual resource inventory were synthesized with the recommendations for the land use and transportation plans to design the visual resource component of the corridor plan. The land use component made recommendations to retain industrial zoning and create high density residential development abutting the highway next to the Neuse River. The transportation plan, in an effort to separate high speed through traffic from localized traffic, proposed a system of parallel collectors. These collectors are smaller service roads, placed not between the highway and development, but behind the first layer of development. Recommendations were made to install traffic signals in major intersections and to restrict driveways and entrances along the corridor. The specific visual resource plan recommendations are listed below.



Viewsheds to be protected in the corridor

1. Median plantings: To provide a unified streetscape and accent the status of the corridor as a major entryway into Raleigh, the median should be planted with a continuous planting design.

2. Focal points: Two small slivers of undevelopable

land were identified within the existing right-of-way on the north side of the corridor as possible sites for public art, special architectural treatment, or planting.

3. High points and good views: High points of developable land were identified as good potential sites for intense development. These sites have strong visibility from the corridor and should showcase high quality residential or commercial development. Good views and vistas to be preserved were also identified along the corridor.

4. Tree preservation: The clusters of mature hardwoods identified should be preserved as homage to the homesteads they once protected. Although Raleigh does not yet have the state enabling legislation to require tree preservation, incentives should be created to encourage preservation of the valuable trees.

5. Neuse River Development: Obscured views to the Neuse River should be opened up to display the natural beauty of the area. Wetlands on the south side of the corridor adjacent to the river should be preserved. A river walk should be designed on the north side of the highway for the enjoyment and recreation of residents and visitors.

6. Special Street Yards: Two new special types of street yards were designed for the streetscape plan. Street yards are areas on private property which contain plantings of trees and shrubs and restrict structures or parking through zoning restrictions. The new street yards were designed to support and complement the land use and transportation recommendations of the corridor plan and to provide a strong visual and spatial edge to the corridor. Intersections with traffic signals were exempted from the application of street yards in order to open the space for a more dynamic spatial experience and to provide greater visibility for the most economically viable properties.

The first of the two new types of street yards is the buffer street yard which was placed on residentially and industrially zoned property. This street yard was designed to create a parkway feeling on the corridor side and an effective buffer for the residential and industrial uses by screening out the deleterious effects of high volume traffic with plants. Parking should be located between the roadway and structure, but should be screened from the road. This street yard uses a varied plant material palette including shade, understory, and evergreen trees and shrubs to create a dense buffer.

The connective street yard is designed to be placed with retail and commercial development. This street yard should act to connect the spaces between the buildings along the corridor with plant materials and provide a better definition of the corridor edge. The cumulative impact of this street yard should guide traffic to safer turning movements at the intersections and focus attention for the traveler more clearly on individual developments. Building setbacks are relaxed with this street yard to encourage developers to move the buildings closer to the street edge, face the parallel collectors and to enable developers to use the property more efficiently. Parking should be located between the building and the parallel collector.

Sample elevation and section of a buffer street yard

Implementation Strategies

Throughout the design process, public forums were held on a regular basis with residents, business owners, and property owners to garner ideas and support for the project. As a result, the approval process was expeditious with few conflicts. At the time of approval, the City Council directed the planning staff to make recommendations for methods of implementation. The staff then organized a seven member task force to investigate possible methods and to refine the proposed street yard concepts. The task force of Appearance Commission members, local landscape architects, business community members, neighborhood and developers' representatives, and staff from the city attorney's office recommended the following plan to the City Council for implementation.

Step 1: Adoption of the corridor study as a small area plan within the Comprehensive Plan.

The City Council has authority to accept or deny site plans for lack of conformity with the Comprehensive Plan. If the corridor study were incorporated into the Comprehensive Plan, the City Council could deny approval to a site plan that did not provide the recommended street yards. This step would not be sufficient to ensure implementation of the corridor plan, however. Some of the property along the corridor is zoned Industrial-1, which does not require City Council approval except for retail and hotel land uses. Instead, this zoning district is approved administratively and requires only staff approval if the site plan is in compliance with the zoning code. For these plans, implementation of the corridor standards would not be assured.

Step 2: Incorporate corridor development standards into a new zoning district.

In order to close this loophole and insure full implementation of the corridor plan, a new zoning district is recommended. This should be an overlay district which would retain the integrity and land use allowances of the underlying zoning districts while establishing the requirements for the corridor plan. This could also provide a vehicle to include the new building setback distances. The overlay district should be incorporated into the zoning code to assure that the site plans which fall under administrative approval comply with the streetscape plan.

The task force also made several ancillary recommendations. It was noted that it is important to allow flexibility to any standards applicable to a variety of sites. In order to allow properties with unusual circumstances to meet the spirit of the code and still be in compliance, an alternate method of compliance provision should be allowed. Secondly, the tree preservation incentives embodied in the current zoning code should be referenced and used in the new zoning district.

Project Update

The Raleigh City Council adopted the U.S. 64 E Corridor Plan into the Comprehensive Plan in April 1991. Following that action, the seven member task force continued to meet for one year to develop the specific width and planting requirements of the two new street yards. The task force recommended the new street yards to the City Council as two separate Special Highway Overlay Districts (SHOD). The City of Raleigh had formerly applied two SHOD street yards in an effort to preserve the green belt surrounding the interstate expressways. The two new street yards became SHOD 3 (buffer street yard) and SHOD 4 (connective street yard) and were incorporated into the zoning code in 1992.

The property recommended by the Visual Resource Component of the U. S. 64 E Corridor Plan was successfully rezoned as SHOD 3 and SHOD 4 in 1994. During the planning process, several site plans were submitted for approvals on the rapidly growing corridor. Although the new standards were not codified, the site plans were approved and development was implemented with the streetscape plan proposals. A master plan is now in the planning process for a large undeveloped portion of the corridor. This master plan is consistent with the objectives of the U.S. 64 E Corridor Plan. It includes preservation of the extensive wetlands next to the Neuse River, development of a high density residential tract, and retention of a major tract of industrial land.

The U.S. 401 N Corridor Plan has also been completed and was rezoned at the same time as the U.S. 64 E Plan. These plans prompted the Appearance Commission to begin work on finding ways to codify the remaining existing enabling legislation for tree conservation through special Resource Management Districts. Following that, the Appearance Commission plans to seek new enabling legislation that would provide a means to require tree preservation.

The U.S. 64 E Corridor Plan seeks to blend the past, present, and future together in a way that is mutually beneficial to development interests and the environment. It emphasizes preservation of the unique visual and natural aspects of the corridor and challenges

Development along U.S. 64E which was implemented using the streetscape plan proposals.

future generations to uphold this ideal during times of growth and development. CP

The Winston-Salem Transit Authority: Planning for Mobility Management

Anna M. Nalevanko

With the passage of the Intermodal Surface Transportation Act (ISTEA) of 1991, the national transportation focus has shifted to a more integrated approach of developing transportation systems. Transit services, infrastructure, and community designs that support transit, such as parking policies, bicycle paths, and transit-oriented development, are all considered part of a balanced, efficient transportation system.

With greater emphasis on transit and non-automobile modes of transportation, transportation professionals are challenged to explore more cost-effective, efficient approaches to deliver transit service, and to pursue better integration of the various public transportation modes (i.e., rail, intercity bus). Public transit can be a viable alternative to the single occupancy vehicle if the service is accessible and designed to meet the needs of the community. In many cases, enhancements can be achieved through the implementation of advanced, transit-specific technologies.

This article outlines how a multi-disciplinary team has come together to enhance service delivery in one North Carolina community. The Winston-Salem Transit Authority (WSTA) is investigating service delivery improvements through the implementation of advanced communication and information technologies. What is learned from the application of transit-specific technologies at WSTA will benefit transit operations in the state and nationally.

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Project Background

The Winston-Salem Transit Authority (WSTA), like other medium to large transit operations in the country, is aggressively assessing its market and examining appropriate technologies to improve service delivery. The way of doing business at WSTA is changing dramatically. WSTA is in the midst of a technology infusion that will in the long-term enhance public transportation services, streamline day-to-day administrative and planning activities, prepare WSTA for future service expansions, link transit modes, and connect transit more closely with traffic management systems. These technological changes are coming about due to WSTA's participation in a Federal Transit Administration (FTA) Advanced Public Transportation Systems operational test project. WSTA, as a result, will be able to provide a more efficient, reliable, customer-oriented public transportation service.

What is Advanced Public Transportation Systems and Mobility Management ?

Before going into the details of the planning and implementation of advanced technologies at WSTA, several concepts must be defined. First, Advanced Public Transportation Systems (APTS) is a Federal Transit Administration initiative to promote the advancement of technologies in transit systems. This FTA program was created as part of the U.S. Department of Transportation's Intelligent Vehicle Highway Systems (IVHS) initiative. IVHS is a range of communications and control technologies developed to enhance road travel through better mobility, energy efficiency, and environmental protection and safety.

Central to the APTS program is the mobility man-

agement approach to service delivery. Mobility management is a means of achieving positive integration and coordination of public transportation services offered by multiple providers and a variety of travel modes. This integration is primarily accomplished through electronic technologies.

Similar in function to a travel agency or financial clearinghouse, the mobility manager provides users with a menu of transit services by telephone and through electronic technologies such as information kiosks and cable television. Through a single point of contact, e.g. calling one telephone number, a potential passenger can schedule a trip, ask about the status of the trip, make arrangements to transfer from one mode of travel to the another, and/or receive a schedule of transportation services available in the city or region. Available services could include both private and not-for-profit providers, such as taxicabs, vans, and passenger trains. The mobility management facility serves as an intermodal transportation resource center for the geographic area served.

This centralized mobility management system is supported with a variety of technologies, including:

- Computer-Aided Scheduling and Dispatching Software: This software automates some management functions in the demand-response service, such as reporting and billing, and provides scheduling assistance to reservation clerks to allow for real-time scheduling of shared-ride trips. This technology serves as one of the bases of a mobility management system.

- Mobile Data Terminals (MDTs): The mobility management system must be able to accomplish efficient communications between the operations center and the vehicle. MDTs provide the opportunity for rapid, high volume communications. Mobile data communications allow two-way interactive message exchange, both between vehicles and between a vehicle and the transit operations center. Data, e.g. short messages, are displayed on a digital screen that is installed on each transit vehicle. The use of MDTs replaces the conventional manual recording of trip information and reduces the need for radio communications and voice "chatter."

- Automatic Vehicle Location Devices (AVL): This technology, particularly satellite global positioning systems (GPS), is installed on transit vehicles to track the whereabouts of the vehicle en-route. Both customers and transit center dispatchers can be updated on vehicle progress towards its designated stop. This technology enables the transit operator to be more responsive to the passenger and allows for better timing of transfers. It also provides the possibility of implementing new service alternatives, such as permitting a bus to leave a fixed-route to pick up a passenger and then returning to the fixed-route.

- Electronic Fare Card Media: These "smart cards" are the size of a credit card and may allow for credits and debits and the storage of other information that may be needed for recordkeeping purposes. For example, billing information can be stored on the card for trips that are subsidized by a human services agency. This can serve the purpose of more accurately attributing a trip cost to the appropriate contracting agency. The information on the card is read by a reader that is installed in each transit vehicle and the data are downloaded for analysis and reports.

The Project Concept

The idea to pursue an Advanced Public Transportation Systems (APTS) technology site in North Carolina originated with the Institute for Transportation Research and Education (ITRE) at North Carolina State University in 1992. Researchers from North Carolina State University's Civil Engineering Department and staff from the North Carolina Department of Transportation, Public Transportation Division (NCDOT/PTD) were involved early on in conceptualizing this operational test activity. The initial goals established for this project were to develop and operationally test a mobility management system for (1) human service transportation, such as shared-ride, on-demand service for persons with specialized needs, and (2) to plan for a Phase II project to integrate this system with a mobility management system for fixed-route bus transit (the traditional general bus service that follows a specific pre-determined route and schedule).

This team was aware of technological activities being conducted in APTS operational test projects already underway. They were also familiar with the characteristics of the types of operations being funded and were aware of some of the pitfalls experienced by these operations in start-up and implementation. This information helped the team define a unique operational test activity and to be better prepared for some of the obstacles that could be encountered.

To be competitive with other transit operations pursuing APTS funding, the North Carolina site needed to possess some characteristics that distinguished it from the other test sites. The Winston-Salem Transit Authority was chosen for several reasons. It is a medium-sized operation, serving both a city and county. The general fixed-route bus, paratransit service, and ridesharing are coordinated under a single authority. WSTA already had some level of computerization in place and the staff had the in-house technical expertise necessary to implement, monitor, and evaluate new systems. Another favorable factor was the endorsement of the city's transportation director and his vision for future integration of some transit and traffic management technologies and a plan for centralizing these traffic and transit operations in a new transportation facility (anticipated to be complete in 1996).

Another reason North Carolina became a serious contender for FTA APTS funds was because there were no other such demonstration projects in the southeastern United States. In addition, no other test site had begun mobility management implementation with a demand-response paratransit service. This project also offered the potential for networking with a social service agency to allow the agency access to trip and billing information and for integrating with general fixed-route bus service in a follow-up Phase II.

Winston-Salem Transit Authority (WSTA): Background Information

According to the 1990 census, the Winston-Salem metropolitan area has a population of about 320,000. Winston-Salem is located in Forsyth County, in the northwestern part of the state. The public transportation services in Winston-Salem and Forsyth County are coordinated under one transit authority, WSTA. The authority is part of the City of Winston-Salem's Department of Transportation but the city contracts with a private management company to run the day-to-day operations of the transportation system.

WSTA is a multi-service operation with fixed-route buses, human service transportation (demand-response/shared-ride service), commuter ridesharing, and van pooling. WSTA operates 58 fixed-route buses. Fixed-route service covers an area of approximately 98 square miles, and in 1993 this service carried a total of about 3.5 million passengers. Trans-AID, the designated coordinated county human service transportation provider serving the elderly, low-income, and mentally- and physically-challenged, operates 17 vehicles. Trans-AID services a larger area, extending into Forsyth County and covering approximately 409 square miles. Trans-AID's ridership totaled about 170,000 passengers in 1993.

Preliminary Planning Activities

Once the operational test site had been identified, the next step was to clarify the roles and expectations of the project team and to develop a proposal for the Federal Transit Administration. The NCDOT/PTD financially supported this planning and proposal development phase through a grant awarded to ITRE.

The City of Winston-Salem was the identified grant applicant. ITRE's role was to assist with administration and technical assistance. North Carolina State University (NCSU) researchers took the lead on proposal development and technical assistance activities. NCDOT/PTD staff provided review and comment throughout as project team members.

The project was designed in two phases. Phase I, the focus of the FTA proposal, consists of two major activities:

1. Implementation of technologies in Trans-AID, the human service transportation service, and

2. Establishment of a test-bed site for research and demonstration of other technologies.

The activities were clearly defined in the Phase I proposal. The primary activities in Phase I involved:

1. Securing the services of a systems integrator with the technical expertise to take the lead on selecting and installing the appropriate technologies and to oversee the integration of the various technologies,

2. Procuring an automated scheduling software system and compatible hardware for WSTA and the remote sites, i.e. the NCSU test-bed site and the Department of Social Services,

3. Implementing the automated system in the human service operation, Trans-AID,

4. Installing MDTs, AVL, and electronic fare card readers in three Trans-AID vehicles,

5. Testing the mathematical algorithms with WSTA data at the NCSU research test-bed site, and

6. Developing the private sector interest and partnerships in testing new transit technologies in a transit

operations setting.

The current project team would continue to be involved if a project were to develop out of this effort. Another North Carolina State University (NCSU) researcher and several graduate students were added to the project proposal. The proposed budget reflected NCDOT/PTD's required federal match and additional support for hardware and other equipment. Phase II was also described in the proposal with the focus of expanding the application and integration of technologies to the fixed-route bus service.

Phase I - Technology Testing in the Trans-AID Service

Upon award from FTA in May of 1993, the project team began to further develop the project objectives and work tasks. A technical proposal and budget were developed for the request for proposals (RFP) to procure the services of the systems integrator. A request for qualifications (RFQ) was issued first to solicit information about firms, their capabilities, and level of interest in this project. The RFP was issued in November 1993. The systems integrator (contractor) was selected and the contractor's automated scheduling software was the first technology to be implemented at Trans-AID.

The on-site WSTA staff members were the key contacts with the new private-sector project team member. In an initial project team meeting, the installation timetable was refined. The project team anticipated frequent meetings of the team and sub-groups of the team over the course of eighteen months to discuss installation problems and implementation strategies.

The contractor worked closely with WSTA staff and NCSU researchers to transfer the data from WSTA's computerized system to the new system. Once the data were transferred and reviewed, the collection of "before" data and staff training began.

The WSTA team members developed their team internally. Staffing was evaluated and new temporary staff was added to facilitate the transition from the more time-consuming task of scheduling trips to learning the automated scheduling system. The dispatching office was redesigned to accommodate the new computer system.

The automated system became operational in August of 1994. The project team worked with the contractor to evaluate and work out any problems with the data and trip scheduling. As the installation was occurring on-site, back in the laboratory the NCSU researcher and a graduate student were testing the mathematical algorithms, using software that they developed and WSTA systems data to evaluate the efficiencies of the routing and scheduling algorithms.

Lessons Learned

There are a variety of lessons to be learned from this planning and implementation effort for mobility management.

1. *The implementation of an automated scheduling system will initially increase the administrative and dispatcher workload.* There is a learning curve of up to six months to develop the expertise to operate the system. As a result, temporary staff may need to be added to handle the reservations. WSTA recognized that it takes time for reservation clerks/schedulers to adjust to the on-line real-time reservation system.

2. *Learn from the mistakes of others.* The project team avoided some of the pitfalls and benefitted from some of the successes of other technology implementations by assessing the shortcomings and strengths of other APTS test projects underway. External factors, such as the political climate and problems with regional cooperation, were factors that delayed other APTS projects. For this project team, it helped to review other technical proposals for their approach.

3. *Allow sufficient time in a project schedule for delays.* Delays can be expected in the procurement process and as a result of software "glitches" or unanticipated data communications problems. In the WSTA project, the Phase I deadline needed to be extended six months, from November 1994 to May 1995, to accomplish all project tasks.

4. *Ensure ongoing communications among team members.* In this case, it was especially difficult to maintain a connection due to the involvement of two university research entities, a local transit property located 110 miles from the other team members, the state public transportation division, and a private sector contractor with a home office in a distant state. There was some shifting of leadership roles and task assignments, but the team has built a solid base. It is committed to the project and has made an effort to improve communications when breakdowns occur.

5. *Calculate the risk.* There is risk associated with being among the first to test a new technology. Some of the "bugs" are still being worked out in the software and in the interfaces that connect the technologies as the contractor adapts them to the operators' needs. The software selected by WSTA has a solid track record in transit operations, but is still a relatively new product undergoing frequent upgrades.

6. *Do not assume that technologies in and of themselves will increase productivity.* Staff need to be trained to understand the specific technology and to maximize its use. The introduction of technologies should also cause the transit operator to examine other practices and policies in the organization and update these so that in combination with the technologies, the greatest efficiencies will be realized.

7. *Ensure the commitment and support of all key players.* Initiating this test in an efficient, coordinated transit system was an advantage. The staff familiarity with automation, together with support from WSTA and city administration, provided a solid base on which to build.

8. *Design an evaluation process.* Evaluating "before" and "after" data is a useful way to understand what levels of efficiencies are achieved as a result of the new technologies. Data relating to the number of passengers per hour, level of customer satisfaction, and the average time required to schedule a trip are examples of the data being collected. WSTA can use this data to determine improvements that could be made to increase productivity and to assist with planning for Phase II. FTA is also interested in the evaluation process. The Volpe National Transportation Systems Center, through an evaluation contractor, Cambridge Systematics, Inc., is conducting an independent "national" evaluation. The purpose of this evaluation is to determine the degree to which the national APTS program and the local objectives of the test are being met. This independent evaluation is conducted to ensure that the reported results are unbiased. In addition, it helps to ensure that the data and analyses are standardized and comparable to other sites. The evaluation plan has been developed, and "before" data have already been collected. After a year of successful installation of the automated software, "after" data will be collected by the project team to compare with the data gathered before installation.

What Lies Ahead?

The Mobile Data Terminals (MDTs), Automatic Vehicle Location Devices (AVLs), and electronic fare card readers were installed on three Trans-AID vehicles in early February 1995. The vendors and products to be installed have been identified and interfaces developed to allow for the communication of data.

The WSTA mobility management project team has begun to clarify goals and objectives for Phase II work. Potential government and private sector funding sources for the Phase II efforts are currently being evaluated and a proposal for Phase II will be developed within the Phase I timeframe.

During Phase II, it is anticipated that MDT's, electronic fare card readers, and AVL systems will be installed throughout the Trans-AID fleet. The mobility management system will be expanded from human services transportation to general public services, including fixed-route transit, ridesharing, and vanpooling. A variety of research and test-bed opportunities will exist in Phase II. They include, for example, the benchmarking of scheduling algorithms, standards evaluation, and testing of service options. Future plans for dynamic traffic management in Winston-Salem will allow real-time traffic information to be shared with public transit vehicles. This significant opportunity to integrate traffic and transit management is a key ingredient for true community- wide, mobility management.

Through the implementation of advanced information and communication technologies, the Winston-Salem Transit Authority strives to achieve an efficient, responsive, integrated service to meet the mobility and accessibility needs of city and county residents. CP

Raleigh's Neighborhood Planning Program and Conservation Zoning Districts

James W. Brantley

As we enter the next century, older neighborhoods are increasingly under influences that can alter their fundamental nature. Traffic and parking problems, infill pressures, changes in land use, turnover from home-ownership to rental, can all contribute to neighborhood evolution and even decline. Unfortunately, neighborhoods seldom have the opportunity to plan pro-actively for their futures; rather, contentious and emotional responses to particular, well-defined "threats" are the norm. Long-term trends go unconsidered and no policy direction is set. In addition, tools for neighborhood stabilization tend to be very limited.

Although many communities have neighborhood planning programs, there are only a handful of cities across the country that have developed neighborhood conservation overlay zoning districts. Raleigh's program is unique in that the particulars of each conservation district are determined through a rigorous, neighborhood participation-oriented planning process. The conservation district permits an unusual level of neighborhood self-determinism about its own zoning. It can also provide a means for neighborhood stabilization similar to local historic district zoning but less intrusive.

Raleigh historically has been reliant on state government, North Carolina State University, and other institutions for a large share of its economy. Development of Research Triangle Park in the 1950s shifted the area from blue-collar to white-collar jobs. The neighborhoods produced by these socioeconomic conditions tended to be quite stable. Several of the oldest neighborhoods, which are within walking distance of downtown, have survived urban renewal to become picturesque historic areas. Many middle-class suburbs with large wooded lots were developed surprisingly close to downtown ("inside the Beltline") through the 1950s and 1960s. In their quiet way, these neighborhoods are at the heart of the identity and desirability of Raleigh.

The City has grown at a steady, modest rate since its founding in the 18th century. By the mid-1980s, however, Raleigh was one of the fastest growing American cities. Infill development became quite common all over the City, and some of the older neighborhoods were subject to new development pressures. Two typical types of infill problems occurred during the 1980s and generated the discussion leading to the establishment of the neighborhood planning program and the neighborhood conservation overlay district. These development patterns, small lot and large lot neighborhoods, are illustrated here with the use of two mythical neighborhoods.

Small Lot Neighborhoods: Funky Bottom

The mythical neighborhood Funky Bottom was subdivided between 1900 and 1910 into lots that are much smaller than the current quarter-acre suburban standard. The development pattern is compact and pedestrian-oriented, with buildings set close to the street and some mixed-use, such as corner groceries. When zoning was established in this area in the 1940s, there was no small lot, detached residential zoning district. Funky Bottom was zoned with what has since come to be thought of as an apartment (typically garden apartment) zoning category. The rationale for such zoning was that the density was higher than in the standard quarter-acre subdivision. Over time, infill construction under the current apartment zoning has

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tended to change the character of the neighborhood. Single-family houses have been replaced with apartments, changing the neighborhood scale and context.

A wide mix of people live in Funky Bottom including elderly people, students, bohemians, and young professionals. Although most residents have grown accustomed to the large number of rental units in the area, a new, particularly massive apartment complex focused concerns that the neighborhood was changing beyond recognition. A fine old bungalow was demolished to allow access to the apartments, and the land the apartments were built on was composed of the former backyards of several other bungalows.

Large Lot Neighborhoods: Forest Woods

Many Raleigh neighborhoods from the 1940s to 1960s were developed with half acre or larger lots. Our other mythical neighborhood, Forest Woods, has large lots because these were stipulated in the original covenants and because the homes had individual septic systems prior to the availability of City services. Since there was no half-acre lot zoning category when Forest Woods was annexed, it was zoned for quarter acre lots. The houses in the neighborhood are modest brick ranch houses. The residents of Forest Woods are middle-class and mostly in their forties and fifties. The lots have become more valuable than the houses that occupy them and the covenants have lapsed. In a particularly controversial instance, rows of houses were bought up and the land was consolidated and resubdivided into quarter acre lots. The new houses were set much closer to the street to optimize the use of the new smaller lots, which cause the new houses to appear to be in the front yards of the older houses. This practice became increasingly frequent during the 1980s. Forest Woods and other similar neighborhoods are very desirable, affluent, and politically powerful, so demands for answers to this problem went straight to the City Council.

When the City Administration was charged by the City Council with the task of studying the situation and making recommendations about possible solutions, problems associated with older small lot and large lot neighborhoods were in the forefront. Certain underlying issues surfaced:

- Older neighborhoods have developed unique characteristics over their lifetimes.
- Development regulations such as zoning generally do not take an older neighborhood's unique character into consideration.
- Residents often have extremely diverse points of view about their neighborhoods, and some are very wary of change.
- Unique aspects of some neighborhoods should be perpetuated and not permitted to evolve into something else.

Given these findings, the problem then became how to implement the goal of perpetuating unique aspects of certain neighborhoods. The rest of this paper describes the formulation of the Neighborhood Conservation Ordinance and how it works, together with examples of four neighborhoods that have developed their own plans.

Crafting the Neighborhood Conservation Ordinance

The heart of the issue seemed to be the need for a zoning adjustment. Two possibilities were to designate more historic overlay zoning districts, or to create some kind of semi-historic overlay district that could be applied to newer areas or less architecturally pristine areas. Raleigh has several local historic districts, administered by the Historic Districts Commission, and the program is considered a success.

The historic district option, however, was deemed unworkable because of the extreme reluctance of many property owners to put themselves under the rigorous supervision of yet another layer of government. An additional level of bureaucratic review was not acceptable. Whatever zoning district was applied to these neighborhoods needed to be administered without additional reviews or subjective decisions.

The alternative was to develop a more flexible type of overlay district. Two types of Neighborhood Conservation Overlay Districts (NCODs), which were dubbed "NCOD 1" and "NCOD 2," were discussed. The district that was finally adopted was NCOD 1. The NCOD 2 designation would have been more stringent, something between NCOD 1 and the historic district, and likely would have been administered by the Historic Districts Commission. This NCOD 2 would have been the kind of conservation district in place in Nashville and other cities across the country, regulating major works such as building additions, but not regulating building materials or colors. In the ensuing years, the NCOD 2 has not been brought up again.

After considerable discussion, an ordinance creating a new overlay district with limited scope and strictly objective administration was proposed. The draft ordinance was prepared by the Planning Department and

the City Attorney under the guidance of the City Council's Comprehensive Planning Committee. From the first, the proposal was very controversial, with considerable opposition from developers, realtors, and landlords, who felt that the proposal over-regulated neighborhoods of the City that had always benefitted from "flexibility." The specters of intra-neighborhood feuds and massive staff increases were also raised. Not surprisingly, many neighborhood activists felt that the proposed ordinance did not go far enough. Some argued that they should be able legally to halt development proposals not to their liking. In spite of this controversy, the only aspect of the draft ordinance that was eventually dropped was a provision for an interim moratorium on subdivision and building permits in areas under consideration. Otherwise, the essential elements of the draft were adopted in the final ordinance. Each unique application of the overlay district would be the result of an intensive neighborhood-input planning process, with several assurances that the majority of the neighborhood supported the use of the conservation district. The aspects of the neighborhood that could be regulated by the district were limited and would be administered in a manner no more complicated than regular zoning. There was also a special allowance to prevent any existing lot or house from being made non-conforming by that overlay district.

The Neighborhood Conservation Overlay District was adopted in 1989, and since then nine neighborhood plans and nine conservation districts have been created. Two of the plans did not result in conservation districts, and two plans each resulted in two conservation districts. As of December 1994, four neighborhood plans were underway with another slated to begin in January 1995.

The Neighborhood Plan

Relationship to the Comprehensive Plan

Policy additions and changes are constantly undertaken in the form of Council-adopted Comprehensive Plan amendments. Twice a year, when Raleigh's Comprehensive Plan is physically updated, various adopted planning studies including neighborhood, corridor, and other small area plans, are inserted into the Comprehensive Plan. Neighborhood plans are by far the most detailed small area plans prepared.

The Planning Process

Neighborhood plans are initiated in one of two ways: by the neighborhood with authorization by the City Council, or by the Council acting on its own. In the first case, a representative of the neighborhood formally requests that the Council authorize the preparation of a plan. Sometimes a petition is circulated in the neighborhood as a show of support, but this is not required. In the second case, the City Council initiates a neighborhood plan on its own, if it feels that this level of study might resolve some issues in the area. Other boards or commissions, such as the Planning Commission or Historic Districts Commission, can request that Council authorize a neighborhood plan. There are no set criteria for the type of areas that can be candidates for neighborhood plans.

Once the project has been initiated, the project boundaries and a schedule are negotiated between the neighborhood, the Planning staff, and the Council. Representatives of the neighborhood express an interest in serving on the task force that will prepare the plan and a list of names is submitted to the Council for official appointment. Inclusiveness and diversity are sought in these appointments. The neighborhood planner assigned to the project works with the task force over a maximum of six months to produce the plan.

Because many of the neighborhood representatives have no experience dealing with municipal government, planning, or even committee work, the neighborhood planners stress a very structured, methodical planning process. Issues are identified, an inventory of existing conditions is produced, and then recommendations are formulated as goals, objectives, policies, and implementation strategies. At the beginning of the process, there is an initial community meeting to introduce the process and introduce the task force to the neighborhood. A list of issues is gathered during this meeting. Sometimes questionnaires are also used to help identify issues. The task force then holds a series of smaller public meetings. Experts from various fields, such as transportation, housing inspections, or parks, are brought in to answer questions and offer advice. On questions of land use and zoning, the neighborhood planner is available to discuss options, including the Conservation District. The task force hosts a second community meeting to unveil the draft neighborhood plan. Copies of the draft plan are mailed to all property owners in the area prior to this meeting. The culmination of this effort is a formal public hearing before the Council and Planning Commission.

For each neighborhood plan there are three mass-mailings to all property owners and up to a dozen public meetings. Emphasis is placed on getting sizable attendance at two community meetings and the final public hearing before the Council.

Required Plan Contents

The ordinance that created the Neighborhood Conservation overlay district stipulates these minimum contents of a neighborhood plan:

- Neighborhood history and evolution,
- Land use inventory,
- Description of housing: existing, new development, and maintenance,
- Inventory of built environmental characteristics, including house height, setbacks and location of main entrance, but not including roof pitch, architectural style, fenestration, building materials, colors, or vegetation,
- Lot size and configuration,
- Open space and recreation,
- Commercial development and revitalization,
- Circulation/transportation, and
- Capital improvement needs.

Neighborhood residents discuss their plan.

Inventorying built environmental characteristics and lot sizes and configuration is the most detailed and time-consuming task in plan preparation. The product, as presented to the task force, is a series of spread sheets of the data collected, the range, mean and median of the data, and descriptive graphs. In addition, staff prepares maps showing non-owner-occupied units, existing zoning non-conformities, and density. This information is then used by the task force in their decisions regarding possible zoning adjustments, including the Conservation District.

Enforcement, Implementation, and the Link to the Neighborhood Conservation Overlay District

Neighborhood plans form a broad policy direction for the future of the subject neighborhoods. The recommendations in neighborhood plans sometimes cover many subjects, and the implementation techniques are varied. Some topics, such as property maintenance beyond that required by the City Code, fall outside of the purview of the City and must be implemented through ongoing neighborhood activism. Unfortunately, this is not always forthcoming and many recommendations lie unimplemented. The most common neighborhood plan recommendations, however, apply to the transportation system and to zoning. Changes to the transportation system are most frequently requests for reduction of speed limits. These are referred to the City`s Transportation Department for implementation. In every neighborhood plan to date, the task force has recommended modifications to the zoning of the neighborhood. Because the existing zoning often allows a significant increase in residential density, some form of down-zoning is usually pursued by the task force to prevent changing the character of the neighborhood. The conservation district can be used for zoning modifications without creating the nonconformities that make other zoning changes so controversial.

Staffing and Budget

The Raleigh Planning Department currently has six divisions: Administration, Zoning, Site Plans and Subdivisions, Planning Services, Economic Development, and Development Planning. The Development Plan-

ning division prepares Comprehensive Plan amendments, including neighborhood plans. There is a district planner assigned to each of four sectors of the City and three additional floating planners who are not assigned to any particular geographic areas. Each district planner is either the project manager of neighborhood plans in his or her district, or works with one of the floating planners who acts as project manager. In the prior staffing arrangement, there was one neighborhood planner and a small pool of staff to assist. Because of the increase in requests for neighborhood plans and the need for a contact person for each sector of the City, staff assignments were re-configured in 1994.

There was an initial budget allocation for neighborhood planning, but after two years this money was not used and was taken from the budget. Varying portions of the salaries of seven staff people go to neighborhood planning, as do some charges for GIS (geographic information systems) time. The neighborhood plans are reproduced in-house as black and white photocopies, so printing costs are part of the general photocopying budget. The final documents are printed in the format of the rest of the Comprehensive Plan, so no special presentation document is made.

The Conservation District

The Conservation District was created to allow neighborhoods the opportunity to identify and perpetuate certain aspects of their neighborhood's development. The ordinance that created the Conservation District set these criteria for the application:

- The area must have begun development at least 25 years prior to filing for the Conservation District designation,
- The area must be at least 15 acres in size, or be an extension of an existing Conservation District,
- The area must be at least 75% developed, and
- The area must possess a distinctive character.

The aspects of the neighborhood that can be regulated by the Conservation District are limited to lot size and width, front yard and side yard setback, building height, main building entrance location, and widths of rights-of-way and greenways.

A rezoning request for NCOD may be filed at the beginning of or during the preparation of the neighborhood plan, but the actual regulations cannot be inserted into the rezoning request until after they have been determined by the task force. The rezoning request is usually filed by the task force. The City Code requires that a majority of the property owners in the neighborhood sign the rezoning petition. Although the task force, which usually has to go door-to-door to collect signatures, hates this part of the process, strong community support is the result. The City itself can also file the rezoning request. This has only happened in neighborhoods that have low owner-occupancy rates after the neighborhood plan has been adopted by the Council. In such cases, the signatures of a majority of property owners are not required.

A particularly attractive feature of the Neighborhood Conservation District is that it does not create any new non-conformities. The regulations apply only to new subdivisions and construction. A common question is, "If my house burns down, and is in a conservation district, but doesn't meet the regulations of the conservation district, can I rebuild it?" Judging from the frequency of this question, one would think that Raleigh has many more house fires than it does. The answer is that if less than half of the value of the house is destroyed, the house may be rebuilt with no additional requirements; if more than half of the value is destroyed, a variance from the Board of Adjustment will be required.

Four Neighborhood Plans and Conservation Districts

Runnymede Road

This unique neighborhood was the first to request a neighborhood plan. The road, which is very narrow and winding, roughly parallels a small creek. The lots are quite large and wooded, and the houses are relatively small and unostentatious, blending into the woodland context. Several of the houses, which mostly date from the 1950s and 1960s, were designed in the modern style by local architects and are of some architectural interest. The residents are well educated and many teach at North Carolina State University. Adjacent to Runnymede Road is the site of a small lake that was drained to allow construction of several large houses of Williamsburg and Charleston revival styles. This type of construction was spreading into adjacent older neighborhoods. In fact, this neighborhood was one of the most active tear-down and infill areas in the City. Lots at the end of Runnymede Road adjacent to the drained lake site were recombined, two houses torn down, and four large new houses were constructed

much closer to the street than the surrounding houses. On these new lots, many large trees were removed and the creek was channelized.

A broad spectrum of Runnymede residents were alarmed about the potential for more of this kind of development. They asserted that their neighborhood had a unique character that was worth preserving in the face of development pressures to the contrary. Several community and task force meetings were held over a six month period, and one of the developers of the new houses was active on the task force. The task force exercised a strong leadership function and gained the confidence of the neighborhood. The neighborhood plan recommended the creation of a neighborhood conservation district based on the actual subdivision and building pattern and expired covenants. The task force also felt that very large houses should be set further back on their lots. Consequently, a graduated setback based on house height was included in the conservation district regulations. Much time was spent during the planning process on issues which cannot be effectively dealt with in the Comprehensive Plan. For instance, because existing parking areas were considered unsightly, a prototype was designed and included in the plan. The prototype has never been used and cannot be enforced.

Considering that this was the first neighborhood plan and the first Conservation District, there was surprisingly little interest from the neighborhood about the whole project. Because of the controversy surrounding the original neighborhood planning and conservation district ordinance and the specter of neighbor against neighbor fights, all parties involved were glad and a little amazed that neighbors, along with the local developer, could go through this process and still be speaking to each other a year later. In the ensuing years, a lot split has been approved and a new house built under the Conservation District regulations, but the invasion of the "Williamsburgers" has ended.

South Park

South Park is one of the venerable African-American neighborhoods located just east of downtown Raleigh. Portions of the area are included in a National Register Historic District, but neighborhood opposition blocked an attempt to make the area a local historic district. The area is bisected by a major thoroughfare that was just a neighborhood street in the past. When a corridor plan was prepared for this roadway, so many neighborhood issues arose that a neighborhood plan was recommended as a follow-through.

The area began development around the turn of the century and was marketed as an opportunity for African-Americans to own their own homes. The street network is a continuation of the downtown grid, and the lots are relatively small. South Park had a mix of middle- and working-class families up through the 1960s, but since then the area has become poorer. Most houses eventually shifted from owner-occupancy to rental. Now approximately 80% of properties are non-owner occupied or vacant. The original zoning allowed twenty units per acre and permitted the construction of apartment buildings sprinkled throughout the neighborhood. In one particularly controversial and conspicuous infill project, a single family house was replaced with a one story four-plex set sideways on a narrow, deep lot. Entrances to the apartments are located off the narrow walkways separating this apartment building from the adjacent single family houses. The front yard setback, per the zoning requirements, is about fifteen feet deeper than that of the adjacent houses, conveniently allowing a front yard parking lot. An array of utility boxes is the only relief for the street facade, which is painted a brilliant blue. Many residents of the area, particularly those who worked on the National Register nomination, were very alarmed by what they saw as the steady replacement of older single family houses with incongruous four-plexes.

The City Council initiated the South Park Neighborhood Plan, and the task force was appointed from among volunteers who came forward at a well attended community meeting. Most of the task force members were older residents who were particularly interested in re-establishing the neighborhood fabric they had known in the past. The development of the plan went slightly over schedule due to the difficulty in reaching a consensus on the task force. Many of the issues were of a social and economic nature and could be addressed only indirectly by the Comprehensive Plan. The task force did, however, feel that the Conservation District would be effective in preserving some aspects of the physical environment.

The South Park Conservation District defines a maximum and a minimum lot size. The underlying twenty units per acre zoning was not changed. The effect of the maximum lot size in combination with the underlying zoning is to limit the size of new apartment buildings to three units. New buildings are required to be set closer to the street than would be allowed in the underlying zoning. The zoning case was filed by the City and was approved with no opposition.

Roylene Acres

Developed in the 1950s and 1960s with one story

Questionable infill in the South Park neighborhood.

brick ranch houses on quarter-acre to half-acre lots, Roylene Acres is similar to dozens of other Raleigh neighborhoods. Many of the residents moved into Roylene Acres as part of the wave of in-migration brought about by the development of Research Triangle Park in the 1950s. The neighborhood is in transition, with a number of new young families moving into an area composed primarily of homeowners aged sixty and above. The older long-term residents are particularly concerned about possible changes in the neighborhood. This single family neighborhood is surrounded by higher density developments, including an extensive apartment area patronized by North Carolina State University students. Although the original covenants are still in effect and the neighborhood is zoned for four dwellings per acre, a constant concern in the neighborhood is the potential for encroachment of apartments into the neighborhood. This is despite the fact that a hotly contested and probably infeasible zone change would be required to permit apartments.

A development proposal to construct townhouses across the street from Roylene Acres instigated neighborhood interest in establishing a Conservation District on this adjacent undeveloped land. The neighborhood petitioned the City Council for a neighborhood plan, and proposed that the plan area boundaries include the townhouse site. The City Council authorized the neighborhood plan, but excluded the contested property from the plan area. The task force had to shift its concern to the neighborhood itself. At first, the task force was very concerned with enforcing certain standards of property upkeep and appearance, including painting, landscaping, grass cutting, on-site parking, and outdoor storage. When they learned that the Comprehensive Plan cannot address such issues, they finally recommended a neighborhood conservation district that simply codified several restrictions found in their covenants.

Mordecai

Mordecai is one of the neighborhoods that ring downtown Raleigh. It is named after the Mordecai House, an early 19th century plantation house that is one of the landmarks of the area. Mordecai is located to the north of historic Oakwood, but does not have the extensive stock of renovated historic houses found in that district. Mordecai has a mix of housing types, ranging from mansions to small Victorian cottages. In general, the eastern area has smaller lots and smaller houses set close to the street while the western area has larger lots and a wider range of setbacks. Adjacent to the neighborhood on the west are extensive railroad yards, a dilapidated mill building, twelve acres of overgrown vacant land, and one of Raleigh's largest, oldest public housing facilities. The area is zoned for ten dwellings per acre, and several infill apartment complexes of different sizes have been built over the past twenty years.

A number of elderly, long-term residents are very active in civic affairs and an influx of young professional people has brought about an even higher degree of neighborhood activism. As a result, representatives of the neighborhood requested that a neighborhood plan be prepared for their area. The boundaries of the study were initially disputed, some feeling that the study area should be much larger than staff originally proposed. An area was finally selected on the criteria that it developed primarily before World War II. When volunteers for a task force were solicited at the first community meeting, over twenty people came forward. As this was an unworkable number, the City Council selected a dozen task force members to

represent the various portions of the plan area.

The neighborhood plan was prepared over a six month period. Because of the level of interest and education of the task force, the process was very rigorous and the final product was carefully conceived. The task force recommended a rezoning package that included three elements:

- A downzoning from ten dwellings per acre to six dwellings per acre, with use limited to one or two dwellings on a single lot in selected areas,
- A Neighborhood Conservation Overlay District tailored to the eastern area with its smaller lots and smaller setbacks, and
- A separate Neighborhood Conservation Overlay District with larger setbacks tailored to the western portion of the plan area.

The neighborhood plan also recommends that an eligibility study for local historic district designation be prepared. If the area were designated a historic district, there would be two overlay districts on several properties. This would probably not lead to any administrative problems since the conservation district regulations are as objective as those of the other zoning categories with which the Historic Districts Commission deals. Changes to the parks and greenways system and the pedestrian circulation network were also recommended, as well as a comprehensive transportation study. Given the persistence of the residents, these recommendations will probably be pursued until implemented.

Conclusion

Because of the manner in which the neighborhoods are selected for neighborhood plans, no prioritizing of neighborhoods by need or eligibility has developed. Consequently, some neighborhoods with lesser needs have been the subject of neighborhood plans and conservation districts while areas of greater need go without. In some parts of town, an initial conservation district has caused interest in surrounding neighborhoods. These have then requested their own neighborhood plans and conservation districts, as if saying, "We don't exactly know what we are asking for but we want one too." This could lead to Conservation Districts covering extensive parts of the City, including many neighborhoods that are not very unique. Recent legislation that requires expensive advertising for the rezoning of many properties at once, such as for the conservation and other overlay districts, may bring about a more careful application of the conservation district.

One of the most stimulating aspects of the neighborhood planning process is its educational function. The staff learns about the neighborhood while the task force learns more about the function of local government. At the beginning of the planning process, many neighborhood representatives are poorly informed about the roles and limitations of the various levels of government and about the workings of the development market. There is also less interest in long-range planning than in short-term irritations, such as barking dogs or the motorcycle parked on a neighbor's front porch. Interestingly, in spite of often vocal opposition to City intervention, there is a desire for the City to silence those dogs and remove that motorcycle. By the night of the public hearing, however, many misconceptions have been lifted and all involved are exhausted but satisfied. A common comment is that the neighborhood has gotten something for its tax dollars.

The Neighborhood Conservation Overlay District has been successful in addressing the discrepancy between zoning and build-out in some of Raleigh's older neighborhoods. Many neighborhoods that are truly unique and contribute positively to the City as a whole have been stabilized by neighborhood planning and the conservation district. The program has been quite successful and has come to receive support from several of its initial detractors. The combination of neighborhood-based planning and neighborhood conservation zoning has been very effective. The program has been described in an edition of "Zoning News," as well as a Planning Advisory Service report entitled "Innovative Tools for Historic Preservation." An upcoming PAS report on neighborhood planning will also feature the program. CP

The City of Charlotte's Neighborhood Matching Grants Fund

Keva L. Walton

Charlotte's Neighborhood Matching Grants Fund is an excellent example of how city government is reengineering itself to better serve all citizens. The Fund is a planning tool that reaches into low- and moderate-income neighborhoods, spurring citizen involvement and leveraging private investments. Consequently, the Charlotte neighborhood-based organizations targeted by the Fund grow stronger and take a more active role in improving the quality of life in their neighborhoods.

History and Background

In January 1992, the Charlotte City Council appropriated $650,000 to establish the Neighborhood Matching Grants Fund. Patterned after a similar initiative in Seattle, Washington, the Fund is an innovative concept that provides matching grant funds to qualified neighborhood-based organizations. These grants permit the organizations to undertake projects that make their neighborhoods better places to live, work, play, and shop. The goals of the Neighborhood Matching Grants Fund are to:

- Build the capacity of and participation in neighborhood-based residential and business associations,
- Allow neighborhoods to determine priorities for improvements in their own areas,
- Leverage citizen involvement and resources to revitalize and reinvest in low- and moderate-income neighborhoods, and
- Stimulate the development of partnerships between the City of Charlotte, resident and business associations, and other community organizations, resulting in projects and products that benefit targeted neighborhoods.

The Neighborhood Matching Grants Fund is one of the tools developed by the City of Charlotte in a city-wide effort to improve the quality of life in the city as a whole. However, the Fund focuses specifically on an area know as the City Within a City (CWAC). This 60 square-mile area in the heart of Charlotte has a population of over 145,000. If CWAC were a North Carolina city, it would be the state's fifth largest. The 73 neighborhoods comprising the City Within a City have the following characteristics:

- 1 of every 6 families lives in poverty.
- 1 of every 7 households is headed by a single female.
- 20 of the 73 neighborhoods experience unemployment rates greater that 10% (while the rate for Mecklenburg County fluctuates between 3% - 4%).
- 21 of the neighborhoods experience unemployment rates between 6% - 9%.
- 44% of the homes are owner occupied and 56 % are rented (for Charlotte, the home ownership rate is 62% and 38% is rental).
- 31% of adults age 25 or older do not have a high

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school diploma (vs. 12% for Charlotte as a whole).

- A majority of the neighborhoods have high crime rates (a 1992 report indicated that 75% of drug arrests were made in CWAC).

These facts demonstrate the urgency of these neighborhoods' problems and the pressing need to address them. By providing an opportunity for residents in low- to moderate-income neighborhoods to organize and take proactive steps towards making a difference in their surroundings, the City realizes both short- and long-term returns on its investments. Immediate and recognizable differences occur in the short-term. Long-term, the program develops empowered citizens, who are able to communicate effectively with their city government and who take ownership of and pride in their neighborhoods. It is this long-term return on the City's investment that will positively impact the statistics for the City Within A City. Because Charlotte's City Council recognizes this fact, the Neighborhood Matching Grants Fund is identified as a Crime Prevention Strategy in the City's recently adopted Community Safety Plan. This five-year plan outlines a strategic approach to address the City's crime problems. As neighborhood organizations in qualifying areas recognize their potential to have a meaningful impact on the destiny of their neighborhoods, planning goals for many of these areas are realized and the City's quality of life improves.

How the Neighborhood Matching Grant Fund Works

Any neighborhood organization within the City of Charlotte that is located in a 1990 census tract where the median household income is below the City's median of $36,654 may apply for a matching grant. Neighborhood-based associations (residential or business) are eligible for the program if a majority of the association's members residing in or operating businesses in the neighborhood are eligible. The association's purpose must focus on improving the quality of life within the neighborhood.

Eligible projects must meet the following criteria:

- Provide a public, neighborhood benefit,
- Involve neighborhood people in the identification, planning, and execution of the proposed activity,
- Be completed within a 12 month time frame, and
- Conform to applicable health safety and legal regulations.

Projects cannot duplicate an existing public or private program or support an ongoing service or operating budget. There are four project categories: Neighborhood Improvement, Neighborhood Organizing and Organizational Development, Crime and Public Safety, and Neighborhood Education, Recreation, and Cultural Initiatives.

The Neighborhood Improvement category includes projects that improve the aesthetic appearance of a neighborhood. Funded projects include landscaping improvements and installation of trash receptacles and sculpture in public areas. Neighborhood Organizing and Organizational Development projects help start or strengthen a neighborhood organization. Leadership training for organization officers and establishing by-laws for the neighborhood organization are examples of projects in this category. Newly forming organiza-

Residents of the Historic North Charlotte Neighborhood Association work to create public art in Charlotte's emerging art district.

tions are eligible for a one-time matching grant of $2 from the City of Charlotte for every $1 the neighborhood organizations contribute.

The Crime and Public Safety projects focus on improving public safety and reducing crime within a neighborhood. Signage informing neighborhood residents where to call when witnessing drug activity and improving the visibility of house numbering in a condominium neighborhood are two examples of projects funded in this category. Charlotte-Mecklenburg Community Police officers are involved in assisting residents in planning and implementing some of these efforts. The community policing effort in general is very involved with many of the organizations seeking matching grant funds. The Neighborhood Education, Recreation, and Cultural Initiatives is a broad category. After-school tutoring programs, computer literacy programs for youth and adults, and senior citizen exercise programs are examples of projects that have been funded.

Projects are not required to fall into one specific category. For example, one neighborhood used Matching Grant funds to renovate an abandoned volunteer fire department for use as a neighborhood community center. This single project addressed aspects of each category. Improving the abandoned structure was a "Neighborhood Improvement" project that dealt with "Crime and Public Safety" concerns by utilizing an abandoned structure that had the potential of attracting vagrants. The renovation project addressed "Neighborhood Organizational Development" by providing a permanent meeting facility for the neighborhood organization, as well as a facility in which "Neighborhood Educational, Recreational, and Cultural" activities could take place. Neighborhood organizations are encouraged to think of new and innovative ideas that meet Fund objectives and make a difference within their neighborhoods.

Matching The Grant Monies

The key component of this initiative is the requirement that neighborhood organizations provide a match equal to or greater than the funds requested. The matching criteria may be satisfied with volunteer labor (valued at $10.00 per hour), cash, donations, or any combination of these. However, 25 percent of the total match must come from the neighborhood organization's own resources.

Efforts by neighborhoods to form partnerships with outside organizations are encouraged. Partnerships provide additional resources to assist neighborhoods in achieving planned projects. To help foster these relationships, the City hosts an annual Neighborhood Matching Grants Partner Fair. This event provides an opportunity for neighborhoods, businesses, and organizations to network and form partnerships.

Reviewing Grant Applications and Assisting Applicants

Two separate teams review and make decisions on submitted grant applications. The Inter-Departmental team is comprised of several City staff members from various departments. They are responsible for reviewing all grant submissions and decisions on small grants ($3,000 and less). The City-Wide Review team is a citizens board appointed by the Charlotte City Council. They are responsible for reviewing and making decisions on all large grants (between $3,000 and $25,000). Both teams bring skills and expertise to the review of applications and provide technical assistance to grant applicants. The teams also establish policy for the Fund.

Each team member is assigned to work with a grant applicant prior to the decision meeting. The team member contacts the applicant, makes any necessary site visits, and assists the applicant in resolving any outstanding issues relative to their neighborhood organization's grant request. At the decision meeting, the team member provides any additional information or clarification on his or her assigned grant request.

Team members also participate in pre-applications workshops. The workshops provide an opportunity for organizations interested in applying for a neighborhood matching grant to discuss project ideas, ask questions, and receive assistance in completing the grant application. The teams play a very active and important role in the success of the Fund.

Awarding the Grants

Matching grant requests are funded at two levels. Small grants of $3,000 or less are awarded four times during the year, while large grants, ranging from $3,000 to $25,000 are awarded twice each year. Requests at either level are rated according to the following criteria, for a possible total of 100 points.

Quality of Match (10 possible points)

- Value of Match (0 - 5 points): Points are awarded based on a formula that calculates a point value for the amount of matching resources that a neighborhood organization will contribute to implement the planned project.

- Match well-documented (0 - 5 points): Points are

The Neighborhood Matching Grant Partner Fair provides neighborhood organizations and interested community partners an opportunity to network to form partnerships.

awarded based on how well the neighborhood organizations document their matching contribution.

Participation (35 possible points)

- Broad Neighborhood Participation (0 - 25 points): Points are awarded based on how well the neighborhood organization involves neighborhood residents in all phases of the planned project.

- Additional Partners/Social Diversity (0 - 10 points): Points are awarded based on how well the neighborhood organization has reached out to involve "partners" beyond the neighborhood organization to assist in implementing a planned project.

Project Need (15 possible points)

- Low-Income Benefit (5 points): Five points are awarded proposed activities for low-income neighborhoods or for projects which target low-income households.

- Documented Need (0 - 10 points): Points are awarded based on whether a project addresses a neighborhood need or problem recognized in a City report, plan, or other publicly defined study;

Project Design (40 possible points)

- Cost effective, well planned, ready for implementation (0 - 25 points): Points are awarded based on how well the neighborhood organization demonstrates that a planned project is ready to proceed if a grant is awarded. Clearly articulated goals, measurable objectives, and a defined time-frame for completion are key factors in awarding points for this criterion.

- Project budget is reliable (0 - 10 points): Points are awarded based on how well a neighborhood organization prepares a budget for the planned project. A detailed line item budget with projected expenses and written cost estimates for the items needed to complete the project are key factors in awarding points in this criterion.

- Innovation (0 - 5 points): Points are awarded based on how the planned project proposes a new or creative approach in addressing an issue.

Success: One Neighborhood Example

To date, 96 projects totaling over $450,000 have received approval for grant funds. A variety of neighborhood-initiated projects are in progress, ranging from landscaping enhancement and computer literacy programs to the renovation of existing structures for neighborhood use.

The Greenville Homeowners Association is a shining example of what can happen when neighborhood residents are committed to making things happen. This neighborhood organization successfully completed three neighborhood matching grantsand is in the process of completing a fourth project. After canvassing the neighborhood, the Association found that computer literacy was a high priority for Greenville residents. The organization applied for its first matching grant and was awarded $7,054 to implement a computer literacy program in their community.

For its match, the Greenville Homeowners Association obtained assistance from several local businesses.

One donated several desks for use in the program, while a computer trainer from a second business donated her professional skills to train several Greenville residents who in turn would train other residents. The value of the desks and the computer trainer's time counted toward the grant match. To fulfill their portion of the match, the first group of residents volunteered for training and then conducted training sessions for other residents. The computer lab is open on weekday evenings at the Greenville community center. Neighborhood residents receive first priority, but as openings become available, people outside the Greenville community may take advantage of the training.

In a second grant, the Greenville Homeowners Association applied for and were awarded a grant to purchase uniforms and musical equipment for the Greenville Community Combined Youth Marching Corps. With the items purchased, the marching corps of young people from the Greenville community traveled to a national drill team competition in Myrtle Beach, South Carolina. The Greenville Corps was the only neighborhood-based entry in the competition. Groups from around the country and Canada participated. The Greenville Corps took top honors, winning first place for "Best All Around Performance." As a result of this victory, the Corps travels the region to perform for various functions. The success in Myrtle Beach resulted in an additional surprise for the Corps. A local music company acknowledged the diligence of this group by donating new musical equipment valued in excess of $21,000 to the Corps.

Membership in the Greenville Community Combined Youth Marching Corps is earned. The youth must keep their grades up, participate in the afterschool tutoring/computer literacy training classes, and participate in community service projects. To date, there are over 50 young people involved. The Greenville Homeowners Association is evidence that residents in low- to moderate-income neighborhoods can and will take an active role in making positive changes for the betterment of their neighborhood and neighbors.

Next Steps

Work with organizations to further strengthen their capacities will continue through 1995. Increasing awareness of the Fund among newly formed neighborhood-based organizations is also a major focus area. Additionally, showcasing the many successes resulting from the diligent work of the City's neighborhood partners is of great importance. The Partner Fair of March 1995 paid special tribute to the many successful projects in Charlotte's neighborhoods with assistance from the Neighborhood Matching Grants Fund.

Beyond the process of awarding and receiving grant monies, the Neighborhood Matching Grants Fund is a catalyst that motivates, leverages resources, and invests in the City of Charlotte's future. Equally important is investing in the leaders of tomorrow and instilling a sense of community pride and activism. The Fund represents a commitment to making a significant, positive change in the lives of neighbors. The Fund helps ensure that each neighborhood has an opportunity to begin the journey toward recognizing its full potential. CP

The French Broad River: Revitalizing Asheville's Riverfront

Karen Cragnolin

The French Broad River passes through Asheville and has been the historic site of numerous activities, from an entertainment center to a home for industry. This is the story of the effort to turn the depressed industrial area along the river into a vital part of the City of Asheville. It is the story of the American river in microcosm, full of paradise and paradox.

History of the French Broad River

At the turn of the century, the French Broad River was largely undeveloped, although it had been the preferred transportation option until the railroad came to Asheville in the 1880s. Then, in 1905, the Asheville Electric Company created a small diversion off of the French Broad River. Called Riverside Park, it included a carousel, a boat house, and an outdoor movie screen that could only be viewed from the river. Many of today's visions of what the river should be are based on the memory of Riverside Park and how integral it was to the life of the community. Much of Riverside Park was destroyed by fire in 1915, and what remained was wiped out by the great flood of 1916. Riverside Park was never rebuilt.

The flood of 1916 had grave consequences for life in urban Asheville. Before the flood many people lived on or near the river, next to large cotton mills and tanneries. After the flood, the factories stayed but the residents moved. The 1920s and 1930s were the heyday for the factories along the river which provided much needed jobs for the people of the region. Ice houses, distilleries, and coal and grain storage facilities complemented the thriving trade in cotton and hide tanning which flourished along the urban riverfront. Eventually, the thriving factories of the 1920s and 1930s closed, leaving abandoned industrial buildings along Asheville's urban river corridor. Years of neglect coupled with no long-term planning turned the banks of the French Broad River into auto graveyards and landfills. The views of the river from the many bridges passing over it were anything but attractive. Discarded tires, abandoned automobiles, and bone distillation plants lined the banks of the urban riverfront.

During the era of urban renewal, Asheville, like many cities, built public housing projects. Asheville's public housing projects were placed out of sight and out of mind—along the French Broad River. New roads were built that divided the river and the downtown, further isolating the river and making access nearly impossible. The French Broad River in Asheville became a no-man's-land.

Public Support for the River

In 1950, a young woman named Wilma Dykeman published a book entitled *The French Broad.* Today she regales audiences with tales of her difficulty getting the book published. Publishers looked at the title and assumed that a titillating tale awaited them regarding a foreign woman. Even more difficult were her efforts to include a chapter about pollution in the book. The river had endured decades of misuse with no state, local, or federal regulations to protect it. To interest her publishers, and to provide a sense of

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Old Riverside Park (1905-1916).

anticipation, she entitled her chapter on pollution, "Who Killed the French Broad." In spite of her publisher's reservations, she convinced them that pollution of the river was a story in need of telling. Once the book was published, "Who Killed The French Broad" became the most talked about chapter and attracted the most media attention.

In the years that followed, public interest in the river helped to stave off another challenge. During the 1970s, the Tennessee Valley Authority (TVA) looked at the French Broad and determined that they could control flooding and generate hydro-electric power if they dammed the river. Almost overnight, a group of citizens banded together from all across western North Carolina. They called themselves the Upper French Broad River Defense League and began a legal battle to keep the French Broad flowing free. They won. Today the French Broad remains a free flowing river without dams that is subject to periodic flooding.

Having lost the battle to dam the French Broad, TVA changed course and appropriated funds through the local Council of Governments, the Land-of-Sky Regional Council (LOS), to create a series of river access parks along the 117 miles of the French Broad River. Once the river access parks were established, the LOS wanted to keep local attention focused on the French Broad River. To accomplish this, they helped create The French Broad River Foundation (FBRF). The mission of the FBRF was to create more river access points for recreation while increasing public awareness about clean water. The FBRF became a non-profit organization championing the French Broad throughout its 117 mile watershed. Jean Webb, an Asheville native and longtime citizen activist, became the FBRF's first chairperson.

As the director of Quality Forward, a group which led the Asheville bicentennial effort, Jean understood the importance of clean streets, recycling, and clean water. During the 1980s, Quality Forward, the FBRF, and other citizen led groups sponsored river clean-up efforts. Simultaneous with these events, policymakers determined that the only reliable source for local drinking water was the French Broad River. A series of management studies and evaluations concerning the French Broad as the primary drinking water source for Buncombe County were initiated. If the region were to grow it would need an abundant source of water, and the French Broad River was the only option.

Concurrent with these studies, one local politician recognized the potential for developing the French Broad as a recreational and tourist destination. Funds for studies were appropriated through LOS and TVA to look at ways of developing the river. The Asheville Area Chamber of Commerce hired a consultant to determine how to keep people in the area for "one more day." Asheville's premier tourist destination, the Biltmore Estate, attracts 750,000 visitors a year and pumps millions of dollars into the economy. The consultant recommended developing the French Broad River as the best way to keep the tourists in Asheville "one more day." It seemed logical that if another tourist destination spot were developed along the riverfront, the tourists would multiply and extend their visits.

Also during the 1980s, the City of Asheville began a long-term public participation process called "Alter-

natives for Asheville" to ask citizens what they wanted their city to look like in the year 2010. A series of public hearings held across the city attracted citizens clamoring for the revitalization of the French Broad as a mixed-use area with greenways, walking and biking paths, and a reduction in the number of polluting industries along the river's edge. The city adopted the "Alternatives for Asheville" recommendations and incorporated them into the award-winning City of Asheville 2010 Plan.

RiverLink and the Riverfront Plan

In April 1989, RiverLink, then a loosely knit group of volunteers known as the French Broad Riverfront Planning Committee, was created under the auspices of the Asheville Chamber of Commerce and the FBRF to develop a plan for the Asheville Riverfront. The Chamber was primarily interested in the economic development opportunities that the river offered. The French Broad River Foundation's primary concern was better river access and improved water quality. One thing was clear to both organizations—a marriage had to occur. Neither the environmental nor the economic development goals could be reached without the participation and input of both groups.

Wider participation was also sought from the general community. Numerous contests for Boy Scouts and Girl Scouts were held in an effort to gain input into what children wanted along the river. The kids responded in great numbers with posters and dioramas depicting a user-friendly river peopled with bikers, runners, restaurants, and canoeists. A second contest focused on gaining input from the region's burgeoning retirement community. The adults were concerned with good lighting, security, residential opportunities, stable asphalt surfaces for leisurely walking, and the opportunity to enjoy a meal or buy a specialty item at a boutique along the river.

Not everyone was supportive, however. Initially, several of the river's industrialists feared a revitalized riverfront would put them out of business. Additionally, downtown enthusiasts expressed concern that focusing on the riverfront would detract funds and attention from the ongoing downtown revitalization effort. This fear has been allayed. Asheville is emerging as the regional hub for western North Carolina. The concept of "downtown" has recently been expanded to include west Asheville, Biltmore Village, Montford, and the French Broad River.

The Riverfront Plan Charette

The Z. Smith Reynolds Foundation and a North Carolina civil planning grant helped fund a charette for Asheville's riverfront in April of 1989. Because this area presented many complex problems involving both the natural and the built environment, a joint AIA/ASLA charette team was formed.

Resource teams of experts were assembled from the University of North Carolina at Asheville and Warren Wilson College. City and county employees were recruited along with representatives from state, local, and federal regulatory agencies. Input into the charette would include experts ranging from the Army Corps of Engineers to zoologists. The resource team members agreed to be available twenty-four hours a day for the four day charette.

RiverLink contracted with Peter Batchelor, Chairman of the North Carolina chapter of the AIA, Urban Design Assistant Team, to chair the join AIA/ASLA charette. Peter had gained a national reputation as an urban designer and charette team leader. He divided the charette teams into three groups: one team to focus on reestablishing the linkages between the downtown and the river, the second team to focus on the river within the city limits of Asheville, and the third team to focus on the river as the region's most salient characteristic. Since all of the charette team members were out-of-towners, each team member was assigned a local assistant from the same discipline. In addition to architects and landscape architects, there was also a healthy mix of sociologists, economists, and historians to augment the team's efforts.

A valuable resource and planning tool for the charette was prepared by the Preservation Society of Asheville and Buncombe County in the form of an inventory of historically significant structures along the Asheville riverfront. The building inventory provided many insights into the number of historic buildings available for adaptive reuse and their surprisingly good condition. The sheer number and size of the old industrial buildings presented opportunities for future development which could potentially be funded through historic tax credits.

In order to involve the entire community in the planning effort, RiverLink sponsored a series of public input sessions during the charette, and the public response was overwhelming. The public hearings were aired live over the area's public radio station, WCQS. All day and all night citizens approached the microphones to express their ideas, hopes, and fears. The real challenge lay ahead, however: how to incorporate and balance the needs and desires of the

entire community in revitalizing the French Broad River.

Typical of most charettes, the heavy brainstorming occurred in the wee hours of the morning and more than one resource team member was called at 3:00 a.m. to discuss the issue at hand. The walls of the temporary headquarters for the charette team were covered with maps and diagrams. Reams of paper littered the floor and the coffee pot perked around the clock, keeping the charette team members alert. Local restaurants and garden clubs donated food, and a constant stream of interested citizens participated in the on-going discussions.

On the morning of the fourth day, a tired but exhilarated charette team emerged with a plan. As the TV cameras and radio microphones reported the results of the charette team's findings, a new era and image began to emerge for Asheville's ailing riverfront. *National Geographic* magazine dispatched a photographer to cover the entire proceeding for inclusion in the June 1990 issue on Greenways Across America. The Asheville Riverfront Plan, complete with maps, diagrams, and text, laid out a mixed-use plan for the revitalization of the French Broad's urban corridor that satisfied the needs of the business, environmental, and recreation communities.

The Riverfront Plan was presented to elected officials in the city and the county. The plan was immediately accepted as the official vision for the rehabilitation of the French Broad River. The city adopted the plan as an addendum to its award winning 2010 Long Range Comprehensive Plan. The Riverfront Plan was awarded the North Carolina American Planning Association award for "Large Community Outstanding Planning" in 1990. It was also awarded the 1989 PICA, a printers award for the most beautifully designed not hardbound book.

Although the citizens of Asheville viewed the river as a mixed-use opportunity and were willing to help restore it, they were not interested in drinking water from it. In May 1989, a public referendum was held to provide the funds necessary to build a water treatment plant on the French Broad River. The referendum was soundly defeated. The citizens did not believe that the river could be treated to provide safe drinking water.

The Next Steps

The French Broad Riverfront Planning Committee incorporated as RiverLink in order to carry the plan forward. The new name helped identify the mission—relinking the river back to the community. RiverLink became a contract agency with both the city and the county. Every six months, written reports were presented to local government officials detailing the riverfront revitalization effort.

In order to get people on the river, or rather to show them how to get to the river, RiverLink began leading monthly bus tours. At least once a month over the last three years a mixture of community leaders, elected officials, retirees, garden club members, and interested citizens board a bus in front of City Hall and begin the Asheville riverfront tour. The bus route traces the old trolley car route that carried people to Riverside Park. RiverLink calls this pivotal connection between the downtown and the river "the Patton Avenue spine." During the two hour bus ride, people eat their lunches and visit Asheville's oldest neighborhoods, the site of Asheville's first airport, the old Riverside Park location, dried up lake beds, the Biltmore Estate, and The Richmond Hill Inn. The tour also helps people envision linkages from the river to the North Carolina Arboretum and the Blue Ridge Parkway Headquarters Building that is yet to be built. The tours have been RiverLink's most successful marketing tool.

RiverLink's work included more than giving tours, though. When RiverLink presented The Riverfront Plan to the Asheville Tree and Greenway Commission for approval, they were instructed to take it further. They began to reinterpret a county-wide greenway master plan that had been developed in the 1920s. Once the greenway plan was conceptualized, the Buncombe County planning staff mapped it by computer. Public hearings on the greenway plan were held in every county community center, where the crowds have been small but receptive. The idea of using the natural topography of the area as a greenway corridor to tie into the Mountain to the Sea Trail that crisscrosses Buncombe County has mass appeal. The specifics of implementation, however, remain unresolved. In order to get its message across to the general public and to elected officials, RiverLink will sponsor a National Greenways Conference in Asheville in September of 1995. In addition to an afternoon workshop devoted to the riverfront project, the conference will focus on the economic development impacts of greenway development.

The first step in implementing the plan occurred in early 1991 when Carolina Power and Light Company (CP&L) agreed to donate a 1.9 mile section of riverfront property on the west bank of the river to RiverLink for use as the first link in the urban riverfront greenway. The property had been purchased by CP&L as a utility right of way and had been used as an "unofficial" landfill for years. Construction companies and concrete manufacturers had for generations emptied and

cleaned their trucks along the banks of the French Broad River. Kudzu and poison ivy choked the trees and obliterated the view of the river. RiverLink successfully petitioned the city to accept the donation of land from CP&L and entered into a public-private partnership with them to develop it. RiverLink also created the concept of "The Mayor's Greenway Award" to encourage citizens and corporations to donate land for public access along identified greenway routes. The first "Mayor's Greenway Award" was presented to CP&L during a ceremony at City Hall with many handshakes and much goodwill.

RiverLink was very interested in creating a design framework for the revitalization to guide new construction and adaptive reuse projects. In September 1991, RiverLink sponsored its second charette to develop The Asheville Riverfront Open Space Design Guidelines. This charette was funded through the North Carolina Arts Council, under a regrant provision of the National Endowment for the Arts design initiative program. Once again, a charette team of professionals was assembled. This time the team was comprised of architects, planners, landscape architects, sculptors, studio artists, printmakers, public art advocates, and art educators. The charette chairman, Luther Smith, ASLA, APA, and RiverLink board member, divided the teams into three groups. Group one focused on access and landscape issues, group two focused on structures and facilities, and the third group focused on graphics.

The overwhelming message from the design charette was to keep the project focused on what is essentially Asheville. Indigenous materials, native plants, and historical context should be used as the guiding principals for the design of Asheville's river corridor. It was clear that neither the public nor the professionals wanted a riverfront that looked or felt like Baltimore or Boston. Instead, the development of Asheville's riverfront should be a celebration of Asheville's history. Architecturally, structures should reflect the feeling of old Riverside Park, with steep roof lines and graceful details. Landscape materials could showcase the wondrous botanical diversity of western North Carolina—no Japanese gardens along the banks of the French Broad. Public art was discussed in detail. The charette team members agreed that Asheville's riverfront should be viewed as a canvas. Every item, no matter how mundane, should be chosen to further the theme of celebrating Asheville.

Attempting to Rezone the Riverfront

During this same time period the city embarked on a public process to codify the 2010 Plan. Although the 2010 Plan had been adopted in principle by the City Council, it had never been translated into ordinances to carry forth the vision. The City Council appointed six subcommittees focused on issues ranging from manufactured housing to riverfront revitalization. The six subcommittees were charged with making recommendations to be included in a proposed Unified Development Ordinance (UDO). The riverfront subcommittee was composed of riverfront property owners, developers, real estate agents, and the director of RiverLink. The subcommittee met biweekly over a two year period to hammer out the details of how Asheville's riverfront could be transformed from a heavy industrial district into a mixed-use area that would allow residential, commercial, industrial, and recreational users to coexist. The Asheville Riverfront Open Space Design Guidelines and The Riverfront Plan, coupled with the Asheville 2010 Plan, provided powerful, thoughtful guidance. The committee undertook many field inspections and bus tours of the riverfront area which had now been redefined to include one of the French Broad's main tributaries, the Swannanoa River.

When the Asheville City Council and the Planning and Zoning Commission called the six subcommittees together to report their final recommendations to the public, only one had reached consensus--the riverfront district subcommittee. The committee had agreed that all river businesses should be grandfathered and that no new junk yards should be allowed. It also recommended that speculative grading should be discontinued in the river district because of the fragile condition of the river and the need to protect it as a sensitive and valuable resource. The UDO riverfront committee envisioned a river corridor with a greenway along the river for walkers and bikers dotted with new industries and residential opportunities. This vegetative corridor would also slow run-off and filter pollutants rushing into the river. This was especially important because for all practical purposes there was no storm-water runoff system. Increased use of vegetation would also serve to buffer and screen any incompatible uses which resulted from the mixed-use development. The committee also recommended that any industry damaging to the air or the water should be prohibited along Asheville's urban corridor.

The meeting to discuss the UDO subcommittees' recommendations was punctuated with dissension regarding the recommendations of the other five sub-

committees. The process was stalled. Many thought that the fiercely independent mountain folks of western North Carolina did not want any regulations related to or limiting land use. Several people thought that the UDO subcommittee composition was not representative of the community-at-large. The environmentalists claimed that too many developers had been included in the discussion. The developers claimed that the environmentalists had dominated the process. A small but vocal group thought that any regulation relating to land use was unconstitutional.

It had been more than fourteen years since Asheville's zoning code had been reviewed and many of the laws on the books were contradictory. Asheville's board of adjustment greets a steady flow of customers seeking variances from the laws on the books. Adding to the confusion are the on-going debates regarding the regulation of outdoor signs and "private property rights."

Following the public meeting to hear the six subcommittees' recommendations, city planning staff was directed to take the UDO recommendations and to begin to write an ordinance that would address all the needs of the community and the conflicting demands of its citizens. Today, the UDO is still in committee and remains hotly debated. Most recently, the city hired its former interim city manager to review the entire UDO and make recommendations regarding its passage. Despite the delay enacting the UDO, it is commonly agreed that mixed-use development is the wave of the future for Asheville's French Broad River.

Riverlink Continues

Nineteen ninety-two was a pivotal year for RiverLink. RiverLink needed a permanent base on the French Broad River. The Janirve Foundation provided a grant for the down payment and RiverLink acquired The Warehouse Studios on October 1, 1992. Financing was provided by Public Interest Projects. The building was perfect--it provided office space, a large conference room, and eight artist studios. Rental of the studio space covered the costs of the mortgage, taxes, and utilities, allowing RiverLink to locate on the river virtually rent free. Studio tenants reflected the new crafts industry that was emerging along the riverfront to replace the cotton mills and tanneries that had once provided jobs for Asheville's workers. Today, the riverfront's industrial buildings provide the large open spaces and inexpensive rents that artists want and need. Potters and glass blowers, sculptors, welders and iron workers, bookmakers, furniture makers, studio artists, and graphic artists are producing their crafts and creating their art along Asheville's riverfront corridors. Recycling operations are also flourishing.

After moving to its new office, RiverLink focused on where to start the development of the riverfront project. It was soon agreed that the first project should be on the west bank at the confluence of the French Broad and Swannanoa Rivers. RiverLink received a grant from the Z. Smith Reynolds Foundation to hire a landscape architect to develop a four-mile master plan for Asheville's urban river corridor. RiverLink proceeded to sell "Deeds of Support" for one foot sections of greenway and sponsored a number of fund-raising events to match the Reynolds Foundation grant. Finally, a request for proposals was sent throughout the southeast region.

In keeping with the tradition of multi-disciplined teams to design the Asheville riverfront, RiverLink sought to hire not only landscape architects but also architects and engineers to work together with the city's very talented landscape architect, Al Kopf, and the Parks and Recreation Department. The design had to ensure that Asheville's riverfront greenway was low maintenance, secure, and filled with magic. It also had to be designed to withstand flooding. Ever present was the perception that the river was the dividing line between the haves and the have not. Maybe, instead of dividing the city, the French Broad could help knit the community together. The plan had to exceed everyone's expectations to be successful.

RiverLink contracted with the firms of Edward D. Stone, Jr., ASLA and Mathews and Glazer Architects as well as two local engineering firms to provide input into the structural, electrical, and mechanical needs and limitations of the riverfront greenway. The Western North Carolina Surveyor's Association provided all the surveys for the planning and design process as an in-kind donation. The surveys confirmed a long held suspicion—the French Broad had numerous wetland areas. These wetlands have been incorporated as a distinctive design feature of the riverfront greenway.

Over the years, the city had accumulated funds in its capital improvement project fund (CIP) for the riverfront effort. These funds were augmented by a Federal Land and Water Conservation Fund grant. RiverLink received "bricks and mortar" grants from the Janirve Foundation, the Asheville Council of Garden Clubs, area Rotary Clubs, individual garden clubs, Robinson-Humphries, and numerous special fund-raising events.

On December 23, 1993, a contract was signed to begin construction on the first link of the riverfront greenway. French Broad River Park was designed with the entire watershed in mind. It was conceived as the demonstration project, meant to set the standard

and pace for all future river park development. The park would have it all, including 10 foot wide asphalt trails, the first public restroom in the river corridor, a picnic shelter reminiscent of old Riverside Park, an observation deck, a lighted parking lot, wildflower gardens, native plants, fishing areas, and wooden boardwalks over enhanced wetland areas. In keeping with the guidelines of the Americans with Disabilities Act, the park was designed to be completely handicapped accessible. The park was dedicated on September 25, 1994 and has been used non-stop ever since.

The winter, spring, and summer of 1994 were the wettest in memory. French Broad River Park flooded twice during construction. It was completely inundated on August 17, 1994, but suffered no damage. In fact, the floodwaters left behind two inches of rich French Broad River silt which is now covered with nice green grass.

As another step in the riverfront revitalization project, the City Council directed planning staff to develop a neighborhood plan for Chicken Hill in November 1994. Chicken Hill is the river's oldest neighborhood and is in serious decline. Petitions to direct Community Development Block Grant (CDBG) funds towards Chicken Hill had been denied for three consecutive years. Community input sessions were planned for February 1995, and discussions are underway on how to attract funds from the Appalachian Regional Commission and the Economic Development Administration, as well as CDBG monies. The Chicken Hill area has dramatic elevations, which could provide an entrance with sweeping mountain and river views. It could also become the pivotal connection between the downtown and the river. Gentrification and displacement of the residents are issues RiverLink and the city will wrestle with as the neighborhood plan moves forward.

Two other events affected the riverfront project in December of 1993. The French Broad River Foundation decided to close its doors and turn over its geographic and program responsibilities to RiverLink. RiverLink was charged with spearheading the economic and environmental revitalization of the French Broad River, not just in Asheville, but throughout the watershed. As a result, RiverLink now sponsors the Volunteer Water Information Network (VWIN) program. This program has 70 monitoring sites along the French Broad River. On the first Saturday of each month, 70 volunteers dip their test kit beakers into the cool waters of the French Broad at precisely 12 o'clock. The samples are taken to a variety of refrigeration points ranging from pizza parlors to funeral parlors. The following Tuesday, interns from the University of North Carolina at Asheville gather the samples and bring them to the university lab for a series of tests. Every six months, a report card is issued describing the condition of the French Broad.

Also in December 1993, RiverLink formalized its on-going partnership with the Preservation Society of Asheville and Buncombe County. Asheville's historic cotton mill was transferred to the Preservation Society by Clyde Savings Bank. The mill, built in 1887, had been identified by RiverLink and the Preservation Society as the key historic property along the urban riverfront. A bankruptcy followed by a bank foreclosure threatened the mill's existence. Today, the mill is available for restoration and is being marketed nationally. Despite its deteriorated condition, the cotton mill is home to a glass blower, a craft cooperative, and a construction company. It produces enough income each month to meet expenses. The roof leaks and a demolition ball has wreaked havoc on one of the oldest sections, yet Asheville's historic cotton mill thumps with life and promise for the future.

Conclusion

The cotton mill's water tower has always been the signature for the Asheville riverfront project and the riverfront trademark. It projects into the Asheville skyline and greets travelers crossing the river as an Asheville landmark. It is rusty and old. This spring, thanks to well known wildlife artist Sallie Middleton, the water tower will be stabilized and painted. Raffle tickets are being sold for a Middleton original framed painting. All of the proceeds from the raffle will be used to rehabilitate this distinctive riverfront landmark. Discussions are ongoing as to whether the riverfront mascot, the blue heron, should be painted as a symbol on the water tower. The herons have returned to the river since the water quality has improved. Last year, the Western North Carolina Nature Center introduced river otter into the French Broad and Swannanoa Rivers. They are thriving. Last week we had a call from the oldest craft cooperative in western North Carolina, asking if we had space for seventeen professional artists in the Asheville Cotton Mill. Hope springs eternal on Asheville's historic river—the French Broad. CP

Reinventing Government in Durham: To Merge or Not to Merge

Andrew Henry and Harvey Goldstein

Reinventing government—initiatives to help make government at all levels more efficient and more responsive to citizens' needs—has been a central theme of the Clinton Administration. In some cases this has meant reducing administrative layers or decentralizing authority and responsibility from federal, to state, to local government. In other cases, it has meant weeding out unneeded services and eliminating regulatory barriers that increase the cost of doing business more than they produce social or economic benefit. In Durham, North Carolina, it has meant a renewed effort to consolidate the city and county governments.

There have been a number of prior initiatives to merge city and county government in Durham. As recently as 1974, a consolidation plan was placed before the electorate but was soundly defeated. In the last twenty years, however, there have been some significant changes in Durham that increase the likelihood of consolidation approval. These include a merger of the formerly separate, and largely racially divided, county and city school systems, the merging of a number of city and county functions into single agencies, including city planning and inspections, and a growing belief that Durham must be perceived as a "good place to do business" in order to continue to share in the economic growth of the dynamic Research Triangle Park region.

The final decision of whether the two local governments will eventually merge hinges, in large part, on political grounds, i.e., what will be the form of a newly constituted single elected body, and which community and interest groups might gain or lose political power. There are also a number of uncertainties about the fiscal and economic impacts of consolidation that will affect the decision of whether to go ahead with a merger.

Durham County Manager George Williams approached the University of North Carolina's Department of City and Regional Planning about conducting a study that would attempt to estimate the likely future impacts of city and county government consolidation in three broad areas:

1. Fiscal efficiency, cost savings, and tax rates.

2. Quality, effectiveness, and responsiveness of providing local government services.

3. Stimulation of economic development in the city and county.

In addition, the study would identify issues learned from other areas' experiences with city/county government consolidation that might make planning for, and implementing, a consolidation in Durham work more smoothly.

A team of second year master's degree students under the supervision of Professor Harvey Goldstein began the study during the fall of 1993. It soon became evident to the team that the collection of information

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upon which estimates of impacts would based would be difficult for several reasons. First, there were few communities of comparable size and political structure that had consolidated city and county governments, and the resulting impacts had not been systematically assessed. Second, citizens in Durham, by and large, were not well-informed about the issue of consolidation and thus their perceptions and attitudes about a possible consolidation were difficult to elicit. And finally, consolidation in Durham was "counter-factual," that is, we could not estimate the likely impacts in the usual way by comparing this situation with another situation of consolidation because the latter could not be observed. These conditions made the study more challenging than many of the team members had anticipated, but at the same time they gave the students a more realistic taste of how many planning studies must be done "in the real world."

Given the study's goal, the lack of available research, and the relative indifference of some Durham groups, much of the study's findings were based on interviews with Durham business, political, and community leaders. These interviews provided the most insightful and relevant estimates of consolidation impacts. A survey of Durham-area businesses, an analysis of other city and county government consolidations in the United States, and an examination of literature concerning consolidations provided additional perspectives.

What is Government Consolidation?

Before presenting the study results, it may be useful to review the current structure of Durham City and County governments and that of a prospective consolidated government.

Durham City occupies about 25 percent of the land in Durham County but contains about 75 percent of its population.[1] What's more, Durham County is a relatively small county within North Carolina. At present, individual city or county departments have sole responsibility for delivering a particular service or performing a certain function. North Carolina State law imposes many duties specifically on county government, such as those pertaining to public education, public health, social services, environmental quality, and the judicial system. Likewise, the city maintains exclusive responsibility for some functions, especially those related to roads, water, and sewer. The two governments have merged some formerly separate services, such as Planning, Inspections, and Tax Collection and Assessment.

Durham represents, for the most part, two governments ruling one people. Durham's continued annexation of formerly rural areas tends to exacerbate the confusion caused by service separation. Perhaps even more confusing is service duplication; both the city and county have continued to maintain responsibility for several important services such as law enforcement, fire protection, and rescue squads. Furthermore, there are two distinct bodies of elected officials, the five-member Board of County Commissioners and the thirteen-member (including the Mayor) City Council. Therefore, although a specific merged department or a single department may be responsible for a particular service or function, most departments are still responsible to two separate political bodies.

A consolidated government's structure would be quite different from the present city or county form. Consolidation would merge services currently being delivered by both governments and it would merge elected officials into a single body. There would be one set of elected officials and one source of government services.

Impacts On:	Prospective Impacts Cited by Respondents
Services	• Few see short run changes. • Most predict negative, long run impacts that will become increasingly pronounced: > increased service costs and declining service quality because of growing inefficiencies and service duplication; > continued confusion among constituents and businesses as to which government agency provides a specific service. • Some predict current high quality of service continuing.
Taxes	Generally predict increased service costs putting even greater pressure on currently increasing tax rate.
Revenue Base	Informants identified several important tax equity issues: • City residents pay more than County residents for shared services; • Owners of undervalued property in the urban services district experience a "windfall" in service; • The City's revenue base is getting poorer, but the County's base is getting richer.

Table 1: Interview Results—Continued Separate Functioning of City and County Governments.

Impacts On:	Prospective Impacts Cited by Respondents
Services	Short Run • Majority envision a rise in short run service costs based on: > the retention of both City and County employees; > and, merger costs and equity pay issues, i.e., bringing county employee pay up to that of city employees. • An almost equal number expect no impact on short run service costs or are unsure of potential impacts. Long Run • Almost all respondents expect substantial long run benefits based on: > the elimination of duplicate services and the cost of City/County function coordination; > and, savings from economies of scale. • Nearly unanimous expectation of service quality improvement based on: > an upgrade of county services as they are brought up to par with city services; > less confusion among citizens; > and, less regulatory burden. • Many believe that government service providers will be more effective when accountable to only a single political body.
Taxes	• Short run service costs will put increasing pressure on perceived current rise in taxes, but in the long run, the dampening influence on rising service costs will ease pressure on increasing taxes. • Tax increases will vary by resident, e.g., some residents will have to pay for service upgrades, and county residents will have to pay higher taxes in order to "carry their fair share."
Business Formation and Job Growth	• Majority believe that businesses will perceive Durham as an increasingly desirable location with a progressive, unified government that seeks to control costs.
Government Responsiveness	Great Majority envision improved government responsiveness based on: • consolidation will "create a less diffuse political focus" and reduce "finger pointing" when dealing with local problems; • and, more focused resources to the area's problems;
Winners and Losers	• Durham as a whole will benefit. • However, some groups may lose: > elected officials and department heads that lose their positions; > county residents and those in the urban services district would pay higher taxes without a commensurate increase in service level or quality; > county residents, liberal voting blocks and the African American community may lose political power as the political base is diffused.
Recommendations	• Some claim that the manner in which consolidation is carried out will have the biggest impact on success. • Many emphasize the need for a carefully planned, incremental consolidation, some recommend study of the school merger to gain experience and lessons. • Most believe that full political consolidation is imperative before merging governmental functions. • Some respondents view consolidation as an opportunity to downsize the government, privatize certain services, or undergo major reorganizations. • Merger objectives must be clear to avoid confusion and resentment, and there must be a high level of public participation to ensure legitimacy.

Table 2: Interview Results—Complete Government Consolidation of City and County Governments.

Interview Results

Interviews of Durham leaders provided insightful information. The study team interviewed 24 people, representing a cross section of Durham's business, political leaders from the city and county, and community leaders, to gather their perceptions of future short-run (two to three years) and long-run (over three years) impacts for two general scenarios: continued separate functioning of the city and county governments and a complete government consolidation. These interviewees tended to be relatively well-informed on consolidation issues, and thus were able to speculate on a wide array of consolidation impacts and identify important issues. The two tables entitled "Interview Results" summarize their responses.

Generally, the local leaders cited few significant short-run impacts if the city and county governments continue to function separately. They were more pessimistic, however, regarding long-run impacts, citing problems in service duplication, constituent confusion, growing inefficiencies, and increasing pressure on local tax rates. They also predicted exacerbated problems of tax equity among city and county residents, and those living within

the urban service boundary (where the city provides water and sewer service).

Under the scenario of a consolidated government, respondents predict little change, positive or negative, in the short-run. The most often cited short-run impacts were increases in the cost of providing government services as a result of reorganizing government entities and possible increases in taxes to cover these costs. The long-run impacts of consolidation were expected to be significant, however, in the opposite direction from the "no change" scenario. The great majority saw substantial long-run positive impacts for service quality, taxes and revenue base, and expected the area to have a better image among businesses considering a move to Durham. The results found no discernible difference in perceptions of likely impacts among respondents from different political interest groups such as the Friends of Durham and the People's Alliance, business interests, and government organizations.

Many respondents did voice a strong caveat with their predictions: the extent of positive impacts would be contingent on how consolidation takes place. By and large, respondents recommended a cautious, methodical process for carrying out a consolidation and suggested that public officials clearly relate consolidation objectives and processes to the public and to government personnel. Furthermore, the leadership and personalities involved in a consolidation effort were widely perceived to hold the key to success. A majority of respondents from a variety of interests also believed a city/county government consolidation is inevitable given the fact that Durham is a large city in a small county.

Respondents were quite animated in making specific recommendations for carrying out a full government consolidation, especially those close to recent city/county department mergers and those informed on the recent merger of the Durham City and County school systems. They cited some departments as candidates for early merging, identified several opportunities presented by a consolidation process, such as implementing a major government reorganization, and speculated on which interests would win and lose as a result of consolidation.

Although the interview results were not quantitative and were based on speculation and opinion, they nonetheless yielded significant and comprehensive information on consolidation. In fact, the interviews proved to be the most valuable source of information for the study among the multiple study methods employed.

Business Survey Results

The possible impact of government consolidation on Durham's business community should be an important consideration in the consolidation decision. In order to assess the business community's opinions on the proposed consolidation, the study team conducted a sample

Result	Basis
Indifferent and Uninformed	• The Business community is indifferent and uninformed about issue of City and County government consolidation. • "No opinion" or "don't know the issue" were by far the most common response to various statement about the consolidation.
Divided on cost, tax and regulatory impacts	• Local businesses do not expect the consolidation to lower their overall cost of doing business, lower their overall tax burden, or lower the amount of regulation that they must face. • Statements regarding these possibilities were fairly evenly divided between agreement and disagreement.
Government will improve	• They believe by almost a two-to-one margin that the level of effectiveness of City/County services would improve under consolidation. • They believe that the departmental mergers that have already taken place (specifically tax collection and planning) have had a positive influence.
Concern and uncertainty on consolidation process	• There is considerable concern about how consolidation would occur in practice; many responses were prefaced with "if done correctly" and "ideally." Many believed consolidation could have overall positive results, but often chose statements of negative impacts as their expected outcome. • There was uncertainty about what stance a consolidated government would take toward business. • Many business owners are less concerned with the form of government than with the opinions of the persons in that government.
Will not affect location decision	• Only 10% of respondents felt that consolidation would impact their decision on whether or not to relocate out of the City or County.

Table 3: Business Survey Results—Complete Consolidation of City and County Governments.

survey of Durham City and County businesses, using a mailed questionnaire containing both choice and open-ended questions. Table 3, entitled "Business Survey Results," summarizes the results of the survey.

The business community survey provided few definitive conclusions concerning consolidation, especially compared to the group of interviewed leaders. There were many "no opinion" answers to both choice and open-ended questions. The type of survey instrument used may, in part, explain this pattern of result; personal interviews are more likely to yield thorough and thoughtful responses than a mail survey. Yet the high frequency of "no opinions" can be interpreted as an indication that businesses do not believe consolidation will have much impact on them, and therefore consolidation is not a very relevant issue for them. In fact, the survey tested this issue of relevancy and found that fewer than 10 percent of the respondents felt that consolidation would impact their decision to remain in their present location or relocate to another city or county.

It was relatively difficult to draw many definitive conclusions from those that did respond. Among the respondents who held an opinion on consolidation, the number who expected consolidation to have net positive impacts on their business was about equal to the number who expected net negative impacts. For example, business' expectations of consolidation's impact on issues such as costs, tax burden, and regulation were evenly divided between positive and negative, and an equal number supported and opposed government consolidation. The business community appeared mixed on their support for government consolidation.

What business owners were most concerned about was how consolidation might occur; the process was more important to them than whether consolidation occurs or not. Consolidation, like many changes in a business environment, will lead to uncertainty. Having knowledge as to how elected and government leaders will manage the consolidation process could alleviate much of the anxiety among business leaders posed by a change in local government structure in Durham.

Other Experiences with Consolidation and Functional Mergers

The study team felt that the experiences of other communities that have undergone consolidation could be helpful as sources of lessons to be learned and problems to be avoided as Durham wrestles with this issue. From a lengthy list of city/county consolidations that have taken place in the last thirty years, the team selected five cases for study. These cases were areas in the southeastern U.S., were "medium-sized," and were similar to Durham. The areas were:

- Athens — Clarke County, Georgia (1990)
- Columbus — Muscogee County, Georgia (1970)
- Houma — Terrebonne Parish, Louisiana (1984)
- Jacksonville — Duval County, Florida (1967)
- Lexington — Fayette County, Kentucky (1972)

Several generalizations can be made from the five case studies:

- Economic development impacts appear minimal. There were neither clear positive or negative changes in the economic condition due to government consolidation. This conclusion is not surprising given that many other factors and events occurring at the same time as government restructuring were also having effects on local and regional economic conditions. Nonetheless, local informants did note that consolidation improved the image for industrial recruitment; prospective companies only had to deal with one government when they located in the area, and, in some cases, consolidation was followed by more innovative public policies and comprehensive planning.

- Fiscal and government employment impacts are mixed. In some cases, local government employment increased in the short-run, but decreased to pre-consolidation levels in the long-run. There did not seem to be any major change in property tax levels attributable to consolidation.

- Reactions to consolidation are generally positive. Interviews with community leaders showed a general satisfaction with consolidation. They often cited improved government services and the elimination of some confusing jurisdictional issues. No one claimed that consolidation resulted in an overall negative impact for their region.

The case studies suggest that the stimulation of economic development should not be the primary motivation for local government consolidation. Some communities believed, however, that although the precise impacts of consolidation were unknown, there

were intangible improvements in community image, and that consolidation did not harm the region.

Merger of Durham City and County Planning Departments

Several of the larger Durham City and County government departments have merged in the last ten years, including the respective planning departments. The results of this merger can provide some useful lessons for what the results of a complete consolidation might be. Though the evidence we have on the impacts of the merger are based upon perceptions taken from interviews rather than on hard data, there is a general belief that the overall result has been positive. The principal results of the Planning Departments' merger have been:

- There is no clear evidence that cost savings have resulted from the merger because measuring planning efficiency in a growing urban area is extremely difficult. However, the government has made staff and budget cuts for reasons unrelated to the merger, and the opportunity to reorganize may have lead to efficiency gains through a more flexible staff structure.

- Residents, businesses, and developers have benefitted from service expansion and clarity. There is a single set of ordinances, one planning office, and one comprehensive plan.

- Employee morale generally remained high in the merged departments. However, there were concerns that the city operating procedures and work "culture" dominated those of the county.

- There is a perception among rural residents that the city is receiving a disproportionately high level of control and benefit over the planning process.

Besides these impacts, the study team also identified several very useful lessons to be learned from the merger of the city and county planning departments:

- Broad consensus among the area's various interest groups is essential for any possible proposal to advance under either functional merger or complete consolidation.

- Decision makers must listen to citizen and employee concerns, and allow adequate time for community participation in order to make the consolidation process legitimate.

- A complete consolidation needs to recognize the different service needs and desires of the rural and the urbanized areas of the county.

Some of these lessons may be more applicable to a full government consolidation than others. Furthermore, it is important not to generalize too much from these lessons: different functions would most likely have different merger experiences and results, and the planning merger did not address one of the most difficult consolidation issues to resolve—the structure of political representation.

Conclusion

The study conducted for Durham cannot state with certainty what impacts a consolidation of city and county governments might bring. Although a variety of information was collected and multiple methods of investigation were employed, no hard evidence was found to support the idea that consolidation would likely lead to significant positive benefits. On the other hand, there is a belief among many civic and business leaders, as well as officials from other areas that have undergone city/county consolidations, that consolidation would result in overall benefits for Durham. The primary benefits may be an improved image of the community among businesses that could potentially expand or locate in the region, and an improvement and expansion in the quality and level of government services. Perhaps the most important study conclusion is that amidst the uncertainty of consolidation benefits, no information source indicated that the long-run impacts of consolidation would be negative.

There are also some relevant caveats and lessons to guide a consolidation process. There is a belief that consolidation, in and of itself, is not a panacea for improving the operation of local government. Instead, the manner in which consolidation is carried out, and the personalities and competencies of those who manage a consolidation may be far more important for ensuring success; close attention must be paid to the process of consolidation. It must be well planned and proceed at a pace that allows for adequate adjustment and must incorporate a variety of interests and employee groups in order to claim legitimacy.

Given several changes over the last two decades, it

is more likely that a government consolidation would be approved now than when last proposed. This study has identified possible positive and negative impacts of a government consolidation and opportunities and issues to be examined through the consolidation process. Now it is up to Durham's leadership to decide whether or not consolidation will bring overall positive results, if consolidation is possible given the current political environment, and if consolidation should be Durham's approach to reinventing government. Recently, Durham convened a task force to study consolidation issues such as a proposed structure for a consolidated government. Although the task force made its final recommendations, consolidation is currently not a high priority among the area's political leaders, and therefore action on consolidation is on hold. CP

Note

1. Durham City's population in 1990 was 136,376 while the population of the County was 181,835 (U.S. Census of Population, 1990).

Patterns of Use in Main Street Activity: A Case Study of Downtown Chapel Hill

Kevin Krizek

With increasing growth in suburban fringes, many downtown areas are faced with challenges to maintain their vitality. A thriving business district, a center focus for the community, and the opportunity to walk from shop to shop are common features that help maintain such vitality. While many of these features are dependent upon larger and more complex factors such as economic conditions, coordinated planning efforts, and striking the correct mix of retail, other aspects, including the physical surroundings, how people use downtown public space, and the safety of pedestrian access, are often overlooked. Unsuccessful public spaces in many cities may be a result of this lack of concern with the quality of human use and activity.

To address this problem, researchers have examined how pedestrians use urban (and small town) public spaces to improve the quality of those spaces for the pedestrian.[1] This paper continues that research by using Chapel Hill, North Carolina as a case study to examine the relationships between patterns of use, the downtown physical environment, and the time of day. I conclude that increased awareness of commonly overlooked items could lead to important improvements in the total pedestrian environment, thereby leading to increased downtown livability and vitality.

Description of Study

The study was conducted on the 100 Block of East Franklin Street, often touted as the "heartbeat" of the Town of Chapel Hill. A lively college town, Chapel Hill has approximately 40,000 residents, many of whom are students[2]. Franklin Street is the main thoroughfare through downtown with the central focus being the 100 block of East Franklin Street, located directly adjacent to the north side of campus. This specific block was chosen for study because it is a section highly traveled by both residents and visitors and is often considered the representative block for the town. Almost all festivities for the town and the university take place in this downtown area.

The 100 block of East Franklin Street (hereafter simply referred to as Franklin Street) is lined with two- and three-story buildings that accommodate over 60 commercial uses. There are also institutional buildings at the east end of the block, including a post office and plaza on the north side of the street and a church and university offices lining the south side. The 1,000 foot blockface has a continuous sidewalk on each side of the street with three well-marked pedestrian crosswalks. The roadway has four lanes for traffic (two in each direction) with one lane on each side devoted to parking, loading/unloading, and bus stops.

The greater downtown area of Chapel Hill is somewhat unusual in that it is linear in nature. Besides Franklin Street, there are two other east-west routes for moving traffic through downtown—Rosemary Street to the north and Cameron Street to the south, both of which only have two lanes through this area. Because of the restricted capacity on these secondary streets, Franklin Street bears the burden of the east-west traffic through downtown Chapel Hill.

Description of Methodology

Data were collected using direct observation by a

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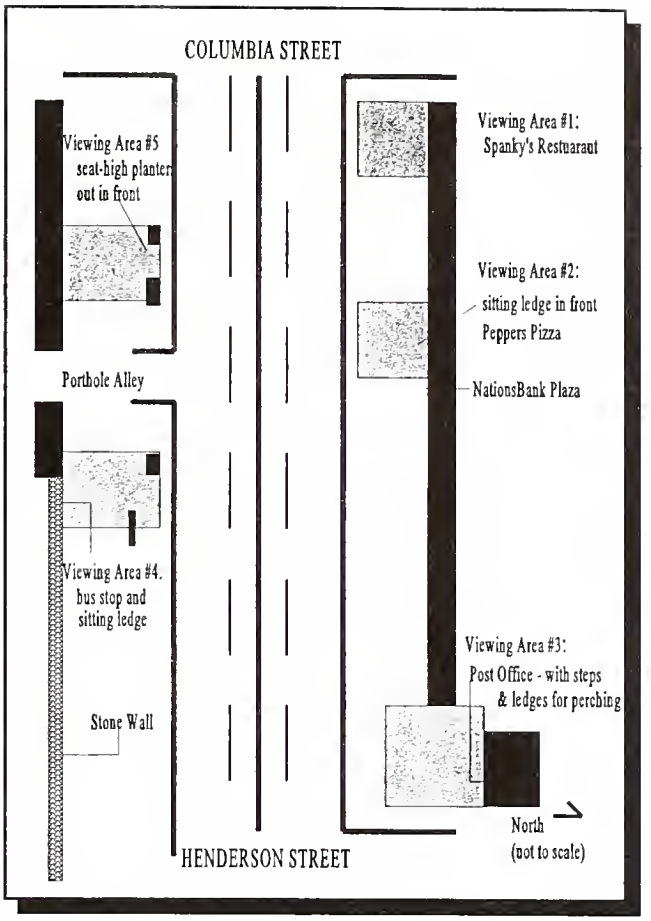
single person doing structured behavior mapping. Five viewing areas along East Franklin Street were chosen as representative places to map the downtown activity. These are shown on the accompanying map. All locations are street-side public spaces which appeared to be high activity areas. All of these spaces except one (veiwing area #3) are approximately the same size, and all contain sitting places.

Seven behavior mapping studies were completed at each of the five locations during three different times of day. These were lunchtime (12:30 p.m.to 1:30 p.m.), early evening (5:15 p.m. to 6:15 p.m.), and late evening (10:15 p.m. to 11:15 p.m.). In total, observations were made 21 times at each location—fifteen on weekdays and six on Saturdays—for each time period. At each time, the number of groups present at each location as well as the total number of persons in each group, their approximate ages and principal activities were noted. Any other relevant circumstances were also recorded (the presence of street performers, for example). Age categories of 10 to 17, 18 to 30, and 31 and over were estimated in order to separate pedestrians who were in high school or younger, university students, and adults. All individuals were counted as their own group and all persons who appeared to be together were judged as a group, irrespective of how many there were. All data were collected during fine weather conditions between October 22 and November 17, 1994.



Map of the viewing areas along the 100 block of East Franklin Street

Less formal methods of data collection included observations while walking the block at random times. In addition, discussions with Town officials provided the background of the downtown situation as well as details of the Town's Streetscape Plan. These exploratory studies were intended to ascertain relationships between patterns of use and the physical environment and to suggest possible improvements for the total pedestrian environment[3].

While this study describes findings that are specific to Chapel Hill, the information gathered and methodology used could be applied to any street scene setting. The primary purpose is to provide useful information that draws attention to commonly overlooked issues, and compare the findings to accepted standards. For example, knowing the age and composition of groups of users on Franklin Street could provide merchants with information that would help them target specific users according to the time of day. Data on people's use of the built environment, including alcoves, benches, and ledges, can also be applied to many different street scenes. In a similar vein, further examining some of the factors that lead to increased vibrancy in one area could be used to enliven a different area.

In the next section, the general patterns of use are explained and the adequacy of the existing facilities are described. The results of the behavior mapping as they relate to use over time are then discussed, followed by a description of variations of use by location and physical design. Finally, possibilities for improvements of the Franklin Street scene are explored.

Patterns of Use and Adequacy of Facilities

As is the case with most downtowns, the dominant pedestrian activity on Franklin Street is walking. In fact, during most study periods, over 90 percent of the groups were simply passing by. While it is impossible to know where everyone was walking to or from, I surmised many were going to one of the many shops on this block. However, during late evening, Franklin Street manifests a hint of the Champs-Élysées in Paris, as a fair number of groups were noted to be window

shopping while casually sauntering down the sidewalk. Franklin Street is one of the few places in the community where people of various ages, classes, and races come together in our increasingly privatized lives.

Sidewalk Width

Using average pedestrian traffic counts at our highest use area, we can determine if the width of pedestrian sidewalk space is adequate, according to accepted standards. The width of a sidewalk depends on accepted levels of service much the same as for roadways. Fruin[4] of the Port Authority of New York determined that, for a level of service A involving some crowding at the busiest time but freely flowing passage the rest of the time, walkways should have a flow rate of seven people or less per minute per foot of walkway width. Whyte[5], who is particularly sensitive about allowing the pedestrian too much space for fear of creating vacuums, endorses this standard. In studies of Copenhagen, Gehl[6] estimated a flow rate of between three to five people per minute per foot of walkway width as a good density range.

Average use over the ten-foot wide sidewalk in front of Pepper's Pizza was about 66 people per 3 minutes. This converts to 2.2 people per minute per foot of walkway. By the above standards and probably to many people's surprise, this sidewalk appears to be bordering on being too wide! But foot traffic before a Carolina vs. N.C. State football game on a Saturday is much heavier—about an hour before kickoff, over 150 people passed the same location. This converts to five people per minute per foot of walkway width, well within the acceptable range. All of this suggests that the width of the sidewalk along Franklin Street is fine.

Safety

Not only does there seem to be adequate sidewalk width, but pedestrians also have a considerable buffer to shield them from traffic. In addition to a row of parked cars, there are about 15 feet along the south side of the street and an average of seven feet on the north side between the roadway and the part of the sidewalk intended for walking. This buffer area usually includes nothing more than a bench, parking meters, light posts, or tree planters, but it is an asset for separating auto from pedestrian traffic. As long as each mode of traffic stays in its respective lane, there can be a "peaceful coexistence" between the two. The problem, however, comes when pedestrians need to cross the street.

In *Pedestrian Planning and Design*, Fruin argues that there are six indices to the pedestrian environment: safety and security, convenience and comfort, continuity, system coherence, and the visual and psychological attractiveness of the environs. Although a four lane roadway can adversely affect each of these, one particularly deserves attention—safety. Franklin Street is classified as a state highway, and sometimes it acts like one, with cars sometimes reaching or exceeding 35 mph. For the pedestrian waiting to cross the street, this presents a real danger. People were often seen inching into the street against the light to spot oncoming traffic, normal behavior[7] which many argue should be tolerated in a high pedestrian area such as Franklin Street. Curb extensions can mitigate this concern and additional safety measures should be sought. Further "fine-grained" research is also necessary to document the factors involved with pedestrian safety at Franklin Street crossings.

Biking and Bike Parking

An additional safety problem involves bicycles. Although cyclists are not permitted on the sidewalk where they would conflict with pedestrians, they are a factor in the roadway itself. Given the importance of bikes as a mode of transportation, there are remarkably few concessions for the cyclist on Franklin Street. There are no bike paths and traffic lanes narrow to ten feet in places. Given that the average auto is about six to seven feet wide and the average bicyclist needs two feet to maneuver, this leaves a margin of only one to two feet for the driver to avoid any autos on the left and cyclists on the right. This does not consider the possibility that the door of a parked car might open, thereby reducing the room even further. The 100 block of Franklin Street is currently not safe for cyclists. As a result, cyclists are referred to the parallel Rosemary or Cameron Streets, where they have barely adequate bicycle access.

Bicycle parking is another problem. Five bike racks are available in the area, and each rack accommodates between two and eight bikes. In total, the bike racks hold about 36 bikes, although some of these spaces are occupied by abandoned bicycles. Because the rack space is insufficient, bicycle owners must seek other places to lock their bikes. On an average day around lunchtime, 21 of 34 (62 percent) parking meters and sign posts along the block had bikes locked to them. Although there is enough room for the use of these make-shift bike racks, the inadequate supply of bicycle parking indicates a lack of respect for cyclists and should be remedied.

Variations in Use Over Time

Variations with time of day are described here to the extent that the activities within each time period can be generalized. The well-documented peaking phenomenon[8] was demonstrated, with the population reaching its high point around noon and then leveling off in the early and late evening. In fact, the total people mapped during the noon period exceeded the sum of the total people from both other times.

Different patterns emerged for different age groups. During the lunchtime and evening time periods, Franklin Street attracts a surprisingly diverse number of age groups for the main street in a college town. There is a consistent mix of age groups at all five locations at noontime. Approximately 60 percent of the people appear to be between the ages of 18 and 30, 37 percent are ages 31 and above, and 3 percent are ages 10 to 17. As we move into early evening, these proportions generally hold. Not surprisingly, late evening marks a drop in people 31 or older, and a peak in the mix of people between 10 to 17 and 18 to 30. In sum, college-age people comprised at least two-thirds of the people in almost every period.

Considering Franklin Street's social atmosphere, one would expect most people to be in groups. As a whole, however, there are more single walkers. Even though the noon observations include more total people, there is remarkable similarity in the breakdown during noon and early evening times, showing 56 percent and 55 percent of people alone respectively. Likewise, there are 32 percent and 29 percent of the total people grouped in couples. Nighttime is characterized by more college-age people and a dramatic increase in the number of people in groups. For weekday night traffic, 40 percent of the people were in couples and 40 percent were in groups of three or more.

The largest difference between weekday and weekend use was a significant increase in the number of people in groups. Noon and early evening traffic showed almost identical numbers, with couples comprising 44 percent of the total. During the night, a mere 8 percent of the people were alone, while there was an increase (52 percent compared to 40 percent on weekdays) in groups of three or more.

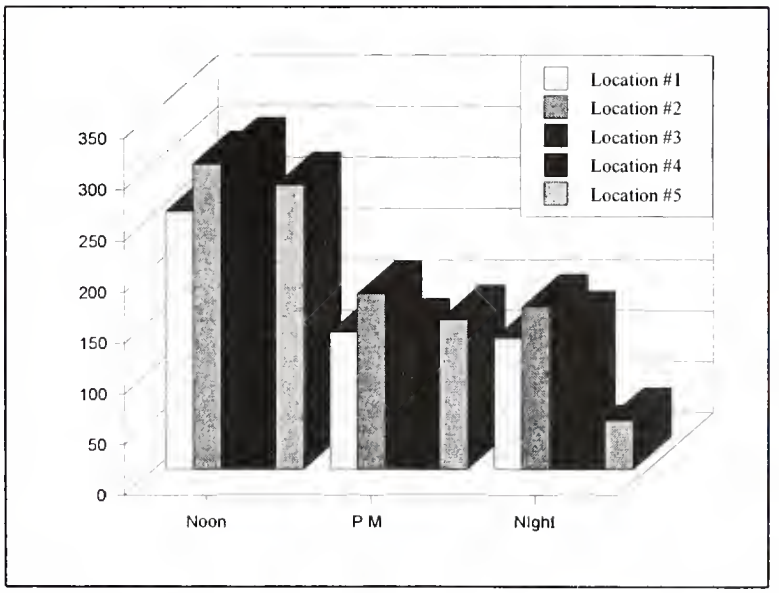
Variations In Use By Area or Features

100 Percent Corner

Whyte[9] uses the term "100 percent corner" to indicate the heart of the downtown area. Most often this is situated at the intersection of two major streets, and in Chapel Hill, the intersection of Franklin and Columbia is considered by most to be the "100 percent corner." This study indicates otherwise. Although the viewing area at location #1 did not take into account people passing on Columbia Street, in this study, the space in front of Pepper's Pizza (location #2), continually had more people than the Franklin/Columbia intersection. In fact, it had a higher number of people than all other locations in 16 of the 21 studies. It seems fair to posit that the highest use downtown area in Chapel Hill is not at a corner, but rather somewhere around Pepper's, on the north side of the street across from Porthole Alley.

Use Across the Block

The graph of the total number of people in each area for each time period during weekdays shows distinct differences according to location. Assuming Franklin Street recruits most heavily from the University, it is interesting to posit the highest use approach points using the data collected. The high use directly across from Porthole Alley probably indicates that it is also a primary entrance to the University. As the Post Office plaza closely rivals the use at Pepper's Pizza, it is



Total persons in each location on weekdays.

probably the second favorite entrance. It seems clear that the walk along the stone wall is the least used entrance point to the University.

In addition, night-time usage was remarkably stark along the south side of the street. This side does not contain as many late night attractions as the north side and appears to have significantly less lighting than the north side of the street. Efforts to "spruce up" this side of the street included planting some ornamental trees. These trees appear to block some of the light, thereby making the south side relatively darker. Although people like trees, at night they like light even more.

Standing

Spatial differences for people standing are relatively simple. The only locations in which more than two people were mapped standing at any time were bus stops. Given the space, the fact that they often chose not to sit is surprising. People may prefer to be on foot or do not like the location of the seating areas. Determining precisely why and where people sit and stand at bus stops is an interesting question that is beyond this research design. However, I did notice that, first and foremost, people waiting for a bus sought overhead shelter. Although it was never raining during any of the study periods, people still preferred to wait under shelter, near the lot-line (where the building meets the sidewalk), and in an alcove where possible. While one site had two alcoves, only one could be used for bus waiting because of the high traffic levels in and out of Pepper's Pizza. For this reason, it was not uncommon for strangers to share a single alcove. At another location with three alcoves, none had heavy traffic. The first individual would place herself in the nearest alcove, with the next person lining up no closer than ten feet away, usually in the adjacent alcove. At times, there would be four people lined up under the awnings, evenly spaced no closer than five feet from the next person.

Sitting Places

The relatively small number of people sitting on Franklin Street raised an interesting question: are people walking because of a lack of good sitting places or because they wish to walk?

Each area studied contained different seating opportunities. During the 21 observed study periods, the eight-foot ledge in front of Pepper's Pizza was occupied 17 times. Sitting space in viewing area #4, albeit divided between the bus stop bench and the stone wall, was occupied 15 times. While each of these locations is near a bus stop, the majority of people sitting in these locations were simply looking for a good place to sit.

In constrast, a look at the bench in front of Spanky's Restaurant explains why it was used less than a handful of times during the 21 observation periods. The street benches are stark in appearance and seem to be randomly placed along the block. The Post Office plaza boasts the highest number of seats of any area, but considering their location more than 25 feet from the sidewalk, it is little wonder that they were rarely used by anyone other than teenagers looking for an isolated place to sit. The steps and ledges are at a good height for perching, and considering the high activity of the Post Office plaza, I cannot help but envision their increased use if they were brought closer to the sidewalk. The tree planters near viewing area #5 were used only by people who were eat food from one of the nearby take-out restaurants.

Nasar's findings[10] that heavily used spaces contain more sitting space do not hold true in Chapel Hill. In fact, the findings from this study indicate the reverse. Pepper's Pizza had the highest use and the least amount of "sittable" space—less than eight feet of bench. Location #4 had the lowest overall use and the second highest amount of sitting room. Despite the stone wall near location #4 being somewhat removed from most of the activities, it may be used more extensively on a good day than all other sitting spaces combined. One conclusion is that people are attracted to specific locations on Franklin Street by forces other than the amount of sitting space. A second conclusion is that people prefer ledges over formal benches, especially when the ledges are on the lot line looking out onto the street scene. The places that contain such a sitting space were used extensively.

Exactly how many sitting places are enough? Franklin Street currently has a total of 610 linear feet of formal and informal sitting spaces. Almost half of this space is comprised of the stone wall bordering the University. Whyte[11] recommends one linear foot of sittable space for every thirty square feet of plaza space. In this case, Franklin Street has only the one plaza in front of the Post Office. Since the entire block is considered a social place and is relatively compact, the entire sidewalk space could perhaps be conceived of as one big plaza. This comes to a total of 39,472 square feet. Therefore, Franklin street provides a linear foot of sitting space for about every 65 square feet of plaza (or public) space—less than half of what Whyte recommends. Although this standard was adapted from plaza to sidewalk space, it does provide an argument for the need to increase the sitting area.

Territories

There appear to be some locations, more than others, that assume a certain character by the type of people they attract. One type is what Whyte[12] terms the "undesirables." This type, which includes panhandlers and vagrants, is present on Franklin Street. Panhandlers were not observed during any part of the daytime on weekdays. They were, however, seen at night and during all times on Saturday, although not concentrated in any one location. Of more interest is the locational patterns of the vagrants that frequent the Franklin Street scene. By far, the most noted character was an older man called "Mr. C" because he was always seen smoking a cigarette. Of the 14 study periods at Pepper's Pizza during daylight, "Mr. C" was spotted 12 times.

Location #2 in front of Pepper's Pizza.

At the time of this study, a Chapel Hill ordinance prohibited peddlers in the public right-of-way along Franklin Street. A driving force behind this ordinance are the merchants who claim that any peddler or vendor who comes in and operates out of a suitcase, does so in direct competition while paying no rent. While the logic behind this is evident, the argument is also an effective way to "dullify" the downtown scene. Fortunately, this ordinance was not strictly upheld. Jugglers sometimes receive money for performing on the Post Office Plaza. On almost any weekend or busy night, you will find "the flower ladies" selling flowers, just as they have been doing for the past 30-plus years. While the "flower ladies" are most often spread out along one of the stark benches near Spanky's, they are sometimes located on private property, either in the alley near Miami Subs or the NationsBank Plaza. [The ordinance was changed in 1995 —Ed.]

For a town of only 40,000, Chapel Hill has a number of street performers. On most Friday and Saturday nights and Saturday afternoon, you will see at least one musician. Street musicians seek high activity areas, and almost all performers were located within 50 feet of the NationsBank Plaza, near the high use area in front of Pepper's Pizza. On two Saturday afternoons, Hare Krishnas were seen chanting in front of the NationsBank Plaza.

In sum, activities on Franklin Street are found primarily on the north side of the street. All street performers, all peddlers, most vagrants, and almost all nighttime activities are on the north side. Perhaps it is because of the differences in lighting, but perhaps there are larger forces at work.

These larger forces may be precisely the reason for the use of one of Franklin Street's more visible territories—the Post Office Plaza, where high school kids hang out. Particularly on Friday and Saturday evenings and nights, high school age kids constitute up to 50 percent of the people in this location. High school kids like to be where all the action is along Franklin Street and they like to have their own space. The Post Office Plaza provides both of these. It is also adjacent to the site of the town teen center. For this reason, it is difficult to determine if there are physical attributes of the plaza that are preferred by high school people or if they hang out there simply due to convenience.

Improvements

Streetscape Plan

Improving the environment of Franklin Street has a long and unresolved history. Almost everyone agrees it is an important part of the community and that steps should be taken to ensure its long-term vitality. The Town recognizes this fact, and as a response, has

adopted a Downtown Streetscape Master Plan in 1993. The plan is intended to apply criteria of the Town's design guidelines to the public rights-of-way of the Town Center.

The plan recommends a curb extension at the street crossing by Porthole Alley, a major entrance point to Franklin Street from the University. This curb extension will decrease the distance pedestrians traverse on the street, allow pedestrians to better view oncoming cars, and make space available for seating areas outside of the primary pedestrian flow. Considering its proximity to our highest use area, such an improvement will probably be successful.

Additionally, the plan calls for an increase in site furnishings in the Central Business District. It recommends different types of trees and planters and suggests that benches be arranged at right angles to each other and varied in orientation to provide different views and sun exposures. While this sounds good, there are some potential problems. The town needs to explore the possibility of placing benches to provide similar benefits of those at lot-line rather than placing them at curbside facing the sidewalk. In addition, if trees are to be planted, every effort must be made to ensure that they will not block existing nighttime light.

The Downtown Streetscape Plan primarily addresses features that are cosmetic improvements for the street. As argued in this paper, these features are vital to a successful center. It is important to recognize, though, that slapping band-aids on old sores will not solve all the problems. Franklin Street cannot optimally serve its many functions because it suffers from a fundamental lack of space.

As is the problem with many towns, there is simply not enough room available to please everyone. The North Carolina Department of Transportation would like to increase the level of service for autos by increasing the lane widths. Many pedestrians desire increased sidewalk widths and room for outdoor cafe seating. Merchants claim that on-street parking is necessary for business. Bicyclists want a four-foot path that will allow them access along the block. All of these demands have to be accomodated within a 100 foot right-of-way. Needless to say, it is impossible to please all parties. Perhaps we should consider the options.

Pedestrian Space

Franklin Street is often touted as one of the most successful pedestrian areas in North Carolina. Considering the number of pedestrians and activities on the street per unit area at most times of the day, this could very well be true. In spite of claims that more walking space is needed, that things are just too crowded, and that the town should make the area into a pedestrian mall, this study indicates that the amount of sidewalk space seems to be just about right.

Bicycle Lanes

As already mentioned, bicycling conditions on Franklin Street are deplorable. Bicyclists are not, and should not be, permitted on the sidewalks; however, they should not be run off the street or subject to undue risk. Referring bicyclists to other downtown streets does not solve the safety problems because the conditions elsewhere are not much better.

On-Street Parking

Local merchants claim that the short-term parking currently available on Franklin Street is essential for maintaining their business. In addition, this row of parking serves as a buffer between the pedestrian area and the constant stream of cars, thereby serving as an important safety feature. Finally, short-term parking spaces in front of stores create a constantly changing facade that helps the area appear vibrant.

Vehicular Traffic Lanes

The North Carolina Department of Transportation claims that the current four lanes of traffic along Franklin Street are the minimum for maintaining an acceptable level of service. They are quick to mention that the lane widths are already below many standards, and that the street currently registers between a "C" and "D" level of service. In lay-person's language, this is between stable and the lowest acceptable standard. Improving this particular situation can be achieved by either decreasing the amount of vehicles traversing the street or increasing the capacity of the street through widening the lanes or adding lanes at the expense of on-street parking.

Widen! Widen! Widen!

With development in Chapel Hill spreading in every direction, traffic volumes on Franklin Street are unlikely to decrease. To improve the traffic situation it might seem as if the only solution is to increase the capacity. But before jumping to this conclusion, we should ask, "What is the ultimate goal in such a situation?" If the goal is to simply accommodate the seemingly ever increasing demands of the auto, then

the lanes should be widened and new ones should be built. However, if our goal is more comprehensive, including such objectives as maintaining an inviting town center, improving pedestrian safety, and encouraging alternative modes of transportation, perhaps we should reconsider our options.

Can You Visualize

What are the options to widening Franklin Street? Advocating decreased capacity along Franklin Street is a very tricky situation and is probably outside the scope of this paper. But as I wear my hat for advocating vibrant public spaces, I envision a five-foot bike lane on each side of the street, outdoor retail sales, street cafes and dining, and improved public squares—all at the expense of just 20 feet of traffic lanes. The town is now considering changing the zoning ordinance to allow curbside outdoor dining in the public right-of-way. This possible variance would apply only to establishments on West Franklin Street simply because this is the only location where there is sufficient room. Such a plan cannot yet be considered on East Franklin Street because of the space problem. Without doubt, outdoor dining would improve the vitality of the downtown area by creating an atmosphere in which people are more likely to stay. People could stop and enjoy downtown Chapel Hill rather than simply passing through it.

Yes, But the Traffic Implications

As I stop dreaming and put on my transportation planner hat, I visualize the terrible traffic implications for Chapel Hill as a whole, not to mention the historic preservationists on Cameron and Rosemary Streets who would be at my jugular for diverting traffic to those streets. If four lanes of traffic are here to stay, it is important that all concessions be made to accommodate pedestrian safety and access. Certain features, such as well-marked crossing areas and curb extensions, are important elements that enhance the total pedestrian environment. The Streetscape Master Plan addresses pedestrian safety through design recommendations for extending curbs to better accommodate pedestrian needs by enhancing crosswalks. The plan, however, does not address the safety concerns attendant with speeding traffic, sometimes within less than seven feet from the pedestrian. According to Untermann,[13] controlling the automobile currently involves two interrelated techniques: (a) slowing traffic by altering the street, and (b) allowing or even encouraging traffic congestion through manipulating the width of the street.

The most effective thing we can do in this situation is to ensure that Franklin Street's traffic lanes are not widened. Another mechanism for slowing traffic is the use of traffic lights and signs.

There are three traffic lights along the 100 Block of East Franklin Street. The town is currently testing a closed loop traffic system using Columbia Street and North Boundary Street (a cross street less than three-quarters of a mile east). This will enable an automobile at 20 mph to travel this entire distance, including the 100 Block of East Franklin, without ever having to stop for traffic lights. Although, the purpose is to reduce the time it takes to travel along the stretch, I cannot help but think about the implications this may have on drivers whom I see racing down the street to be the first one at the next red light. Perhaps the town should consider placing signs similar to those used in other communities, stating something along the lines of, "Traffic signals timed for 20 mph traffic—it does not pay to go faster!"

Perhaps the town should use traffic calming mechanisms such as those found in the Dutch principle of the *woonerf*, which emphasizes pedestrian-oriented street design. Although usually found only in residential communities, further adaptations of the *woonerf* could facilitate its transfer to commercial and retail areas. As Untermann[14] mentions, supporting congestion is a tricky strategy. Traffic engineers have worked long and hard to smooth out the irregularities of traffic and increase flows. For them, congestion is a mark of failure. Since the on-street parking already slows down the observant driver, though, perhaps it wouldn't hurt to keep a red light or two, or even add some cobblestone pavement along the block to do the same.

Implications

The mapping of downtown activity in Chapel Hill provides useful and prescriptive information. In terms of description, the mapping reveals distinct patterns of use that are not necessarily consistent with Nasar's 1990 study or expected findings. These include the slight majority of college age people at noon-time, little correlation between activity levels and sitting places, and the already adequate width of the sidewalks.

The results are prescriptive in that they suggest directions for improved use through design. With regard to sitting places, patterns of use suggest a preference for ledges at lot-line, looking out onto the street scene. Not surprisingly, the somewhat randomly placed stark-looking street benches receive very little use. Underutilized store alcoves were seen to be a favorite by both people waiting for buses and street

musicians. Alcoves provide sought-after shelter for people standing and a stage-like setting for performers. Compared to accepted standards, Franklin Street is also severely lacking in the amount of sitting spaces. This lack may be partially responsible for the high percentages of people walking.

Another observation is that low levels of nighttime use may be the result of diminished lighting caused by increased vegetation. Finally, there is a lack of bicycle facilities such as bike lanes and bike racks.

While a one-time study of street activity is beneficial, monitoring street-side activity on an annual basis could present a more telling story. Records of activity use can assist in evaluating the impact of downtown or other developments. For example, how would a change in retail mix affect patterns of use across the block? Would physical improvements increase the vitality of some areas or blocks at the expense of others. What other factors contribute to a changing street life? Through using observations, such as those developed here, "before" and "after" data could be of assistance to decision-makers. Increased resources or technology such as time-lapse photography, videotape, or computer could increase the scope and detail of the information gathered. Ultimately, the development of empirical knowledge concerning the effects and status of the downtown environment could lead to more informed decisions.

In the meantime, changes to address the shortcomings described in this study will enhance the livability of the public space and make the downtown area a more desirable place to visit. CP

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Notes

[1]Whyte, 1980; Francis, 1984; Gehl, 1987; Nasar, 1990; Li, 1991; Jacobs, 1993.

[2]North Carolina Department of Commerce, 1990.

[3]The objective was not to statistically prove relationships between specific patterns of use and the physical environment while controlling for all sorts of variables. Advanced statistical documentation requires more elaborate research methodology and additional resources that were not available.

[4]Fruin, 1971.

[5]Whyte, 1988.

[6]Gehl, 1987.

[7]Harrell, 1990.

[8]Pushkarev and Zupan, 1975.

[9]Whyte, 1988.

[10]Nasar, 1990.

[11]Whyte, 1980.

[12]Whyte, 1980.

[13]Untermann, 1991.

[14]Untermann, 1991.

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